

Request for Proposal

Issued By

CITY OF PEORIA
PURCHASING DIVISION

PEORIA CITY HALL

419 FULTON ST * ROOM 108
PEORIA, ILLINOIS 61602
PHONE (309) 494-8507 * FAX (309) 494-8510



Sealed proposals will be received at the Purchasing Office,
Peoria City Hall - Peoria, Illinois until
November 7, 2022 at 4:00 PM CST
for the goods or services described herein.

25-22 Harrison School Demolition

THIS IS A PUBLIC WORKS PROJECT AND WILL BE SUBJECT TO THE PREVAILING WAGE ACT

Company Name _____

LEGAL NOTICE
Request for Proposal

The City of Peoria is currently accepting proposals for the following goods or services:

HARRISON SCHOOL DEMOLITION

RFP # 25-22

Pre-bid meeting:

October 18, 2022 at 10:00 am
Harrison School
2702 West Krause Avenue
Peoria, Illinois (Jobsite).

Bids will be received until:

November 7, 2022 at 4:00 p.m.

At the following location:

Peoria City Hall -
Purchasing Division
419 Fulton St. Suite 108
Peoria, IL 61602

RFP documents and information may be obtained from the City of Peoria bid website at
<https://www.bidnetdirect.com/illinois/cityofpeoria>

GENERAL INFORMATION

INTRODUCTION

The City of Peoria is currently accepting proposals from qualified vendors for RFP 25-22 **Harrison School Demolition**.

PRE-BID MEETING

A pre-bid meeting will take place on **October 18 at 10:00 a.m.** at Harrison School, 2702 West Krause Avenue Peoria, Illinois (Jobsite).

RFP INFORMATION

Sealed proposals two (2) copies – will be accepted by the City of Peoria, Purchasing Division, 419 Fulton Street, Room 108, Peoria, Illinois, 61602, until **4:00 p.m. on November 7, 2022**. **Proposals shall be submitted in a sealed envelope or package with the RFP title and RFP number and marked on the outside. Please include your company name and return address on the outside of the envelope.**

Proposals received after the stated date and time will not be considered. Faxed proposals will not be accepted. Proposals will be opened and publicly recorded immediately following the opening time.

AWARD OF RFP

The RFP will be awarded to the proposal that is in the best interest of the City, based on the given requirements and specifications. Responses will be scored according to the given scoring matrix, and awarded based on that scoring model. The City of Peoria reserves the right to award to either a single or multiple vendors. The City reserves the right to waive technicalities and accept the proposal that best suits its needs.

Business Confidential

**Technical Specifications for
Building Abatement, Demolition, and Restoration**

**Former Harrison School
2702 West Krause Avenue
Peoria, Illinois**

Prepared for:

The City of Peoria, Illinois

Prepared by:

WSP

October 2022

Revision # 0

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City of Peoria
Abatement, Demolition, and Restoration

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PART 1 – GENERAL

1.1 REQUEST FOR PROPOSAL

- A. The City of Peoria is soliciting proposals in response to this Request for Proposal (RFP) to find a qualified contractor to perform abatement, demolition, and restoration of the former Harrison School located at 2702 West Krause Avenue in Peoria, Illinois (Jobsite). The City of Peoria is otherwise referred to as the “Owner” in this RFP and referenced documents. The Bidder who may ultimately be awarded a Contract is referred to herein as the “Contractor.” Unless and except as may be expressly provided otherwise, the Contractor shall furnish everything necessary to perform and complete the Work outlined in this RFP.
- B. The content of this RFP, any appendices or attachments, and all documents made available are accurate to the Owner’s knowledge at the time of their creation. These items in no way imply that the information is absolute and the responsibility for validation and verification falls solely on the Bidder during the Bid phase and the Contractor during execution of the Work.
- C. All information and documents comprising this RFP, including Addenda, are confidential and are the property of the Owner. No information contained or referred to in the RFP shall be disclosed or released by the Bidder, with the exception to Subcontractors, during the Bid phase or the Contractor during execution of the Work.
- D. The Owner reserves the right to terminate, at any time and for any reason, the RFP procedure and / or process, to change the terms of this RFP or accept different and / or divergent terms.
- E. The Owner shall not be liable for any costs incurred by the Bidder associated with the preparation of its proposal, future negotiations of a definitive agreement, and closing.
- F. The RFP process will be conducted by Owner officials pursuant to Illinois 30 Illinois Compiled Statutes (ILCS) 500, “Illinois Procurement Code” and Owner purchasing regulations. The Bidder documentation will not be opened publicly but will be opened in the presence of two or more Owner managers or officials. Proposals will be reviewed, and discussions may be conducted with all responsible Bidders who submit proposals determined to be reasonably acceptable of being selected for award. Information derived from proposals submitted by competing Bidders will not be disclosed to other Bidders during discussions. An award may be made on the basis of the initial offering with or without discussions with the Bidders. Proposals are being requested in a manner so that the Bidder shall submit costs for outlined Work in a format that is thought to be most competitive and cost effective for the Owner.
- G. The successful Bidder must comply with the City of Peoria ordinances relating to Occupational License Fees, Business Licenses, payroll and net profits and any other ordinances which may apply.

- H. Proposers may secure additional copies of the RFP documents from the City of Peoria's Purchasing Division website <http://www.peoriagov.org/finance-department/purchasing-division/>.

1.2 BID SCHEDULE

- A. The tendering and award process is expected to follow the following timeline:

Activity	Date
Issue RFP	10/11/2022
Pre-Bid Meeting	10/18/2022
Clarifications Due	10/24/2022
Proposal and Bid Due	11/7/2022
Contract Award (target)	11/22/2022

1.3 MANDATORY PRE-BID MEETING AND ADDITIONAL JOBSITE VISITS

- A. A mandatory onsite pre-Bid meeting will be held at the Jobsite on October 18, 2022 at 10:00 AM CST. Physical participation is required.
- B. The Bidder's proposed abatement Subcontractor **must** visit the Jobsite prior to the Bidder's submission of Bid. The abatement Subcontractor can visit the Jobsite either during the pre-Bid meeting or a subsequent Jobsite visit.
- C. Additional Jobsite visits of reasonable duration may be scheduled with the Owner.
- D. The Bidder (and Subcontractors) must bring and use their own safety equipment: hard hat, safety shoes, safety glasses, reflective vests, and a high lumen flashlight. A safety briefing will take place prior to a Jobsite tour. Portions of the school structure are in a deteriorating state, with debris (fallen roofing, plaster, peeled paint) present in rooms and hallways, and some areas are not safely accessible. Lead and polychlorinated biphenyls (PCBs) in paint and asbestos-containing materials (ACM) are present in building materials.
- E. The purpose of a Jobsite visit is to allow the Bidder (and Subcontractors) to tour the Jobsite to understand the scope of Work. The Bidder shall be solely responsible for conducting such due diligence as deemed necessary or desirable to be fully informed as to the existing and expected Jobsite conditions and matters which might in any way affect the cost and / or the performance and completion of the Work. Any failure by the Bidder (and Subcontractors) to fully investigate the Jobsite and complete due diligence as to Jobsite conditions shall not relieve the Bidder from responsibility for estimating properly the difficulty or cost of successfully performing and completing the Work. A representative from the Owner's team will guide tours of the Jobsite and answer any questions by the Bidder.

- F. Bidders shall make all examinations / investigations necessary to thoroughly inform themselves regarding the supplies and / or service to be furnished in accordance with the Bid proposal. No plea of ignorance by the Bidder, of conditions that exist or that may hereafter exist as a result of failure or omission on the part of the Bidder to make the necessary examinations and investigations, will be accepted as a basis for varying the requirements of the City or the compensation to the Bidder.
- G. Photos, including cell phone images, will be allowed for the Work area only. There shall be no audio or video recordings. Any photography is for the sole purpose of the Bidder in preparation of the proposal and shall not be transmitted to any uninterested party.
- H. No testing or sampling shall be permitted during the Jobsite visit.

1.4 REQUEST FOR PROPOSAL CLARIFICATIONS

- A. The City Purchasing Manager shall represent and act for the City in all matters pertaining to the Bid. If a potential Bidder is uncertain as to the meaning or intent of any part of this RFP, the Bidder is required to seek clarification no later than 4:00 PM CST on October 24, 2022. Clarifications shall be submitted via email to the City Purchasing Manager Justin Danyus at jdanyus@peoriagov.org. Responses to submitted clarifications from all Bidders will be issued via email by the Owner's representative.
- B. If it becomes necessary or advisable to revise any part of the RFP, revisions will be provided by the Owner in the form of an addendum. Addenda will be issued via email by the Owner's representative. The Owner is not responsible for sending addenda to unknown Bidders or the Bidder's planned subcontractors
- C. Only information / clarifications written and issued via Justin Danyus are considered official and binding revisions to the RFP. No other means of communication, whether written or oral, during the pre-Bid meeting or via communication with other Owner personnel or agents during the Bid phase, shall be construed as a formal or official response statement that affects or alters the requirements of the RFP and contract terms and conditions.

1.5 BIDDER QUALIFICATIONS

- A. The Bidder must demonstrate to the satisfaction of the Owner that the Contractor is qualified to perform the Work in accordance with the Contract terms and conditions. No contract will be awarded to any Bidder who, in the opinion of the Owner, is not qualified to perform the Work safely and satisfactorily. Qualifications include, but are not limited to, the following.
 - 1. The Bidder has a satisfactory track record for completing projects safely and in accordance with applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.
 - 2. The Bidder has the financial resources and capital to bond the project and execute and complete the Work within the dates established in Section 01 32 16 – Contract Milestone Schedule.

3. The Bidder has available equipment in sufficient quantity and capability to complete the project within the Owner's milestone schedule timeline.
 4. The Bidder (and Subcontractors) has available personnel experienced in performing the abatement and demolition Work.
 5. The Bidder has completed the abatement and demolition of structures of similar size and complexity and received positive testimonial from the owner(s).
- B. Additional Bidder qualifications required for contract award consideration include the following:
1. The Bidder has completed at least five successful abatement and demolition projects of similar size and scope within the past ten years.
 2. The Bidder has an Experience Modification Rate (EMR) of less than 1.0.
 3. The value of intended Subcontractor contracts does not exceed 60 percent of the Bidder's total Bid, not considering the salvageable scrap credit amount.
 4. The Bidder meets or exceeds the Owner's insurance requirements, as outlined in this Section.
 5. The Bidder meets the good faith opportunity requirements, as outlined in this Section.
- C. The Bidder is required to complete and submit Section 00 45 13 – Bidder Qualification Form as part of the Bidder's proposal, as further outlined in this Section.

1.6 INSURANCE REQUIREMENTS

- A. The Bidder shall submit with their Bid a Certificate of Insurance, as outlined in this Section. Owner requirements for insurance are addressed below. Limits of liability shall not be less than limits indicated. The Bidder shall include incremental pricing in their Bid as necessary to meet the Owner's insurance requirements.
1. All insurance shall be placed with insurers having an A.M. Best rating of A-:VIII or better.
 2. Worker's Compensation and Employer's Liability: This insurance shall protect the Contractor against all claims under applicable state workmen's compensation laws. The Contractor shall also be protected against claims for injury, disease, or death of employees which, for any reason, may not fall within the provisions of a worker's compensation law. The Worker's Compensation and Employers Liability shall be Statutory, \$1,000,000.
 3. Comprehensive Automobile Liability. This insurance shall be written in comprehensive form and shall protect the Contractor against all claims for injuries to members of the public and damage to property of others arising from the use of motor vehicles and shall cover operation on or off the site of all motor vehicles licensed for highway use, whether they are owned, non-owner, or hired. Insurance shall be Combined Single Limit, \$1,000,000.
 4. Commercial General Liability (including Excess / Umbrella Liability as necessary). This insurance shall be written in comprehensive form and shall protect the Contractor against all claims arising from injuries to members of the public or damage to property of the City of Peoria or others arising out of the Contract or

any act or omission of the Contractor or its agents, employees, or subcontractors. Insurance shall be as follows:

- a. Each Occurrence, \$5,000,000
 - b. Personal and Advertising Injury, \$1,000,000
 - c. General Aggregate, \$5,000,000
 - d. Products-Completed Operations Aggregate, \$5,000,000
5. Contractor Pollution Liability. The Contractor shall secure and maintain a Contractor Pollution Liability policy written on an occurrence basis in the amount of \$5,000,000 per occurrence and in the aggregate, and an excess policy following form in the amount of \$10,000,000 per occurrence and in the aggregate. The policies shall include the City of Peoria as a named additional insured.
 6. Certificates of Insurance and Endorsements and Waiver of Subrogation. Satisfactory certificates of all insurance shall be filed with the Owner prior to starting any Work under this Contract. The certificates shall state, and the policy shall provide, that 30-days' written notice shall be given to the City of Peoria before any policy covered thereby is materially changed, not renewed, or canceled. The Contractor hereby waives, and if required by any of the above policies will cause its insurer to issue an endorsement thereto to waive, all rights of subrogation against the City of Peoria with respect to any subsequent claim or loss payable or paid under each of the above policies. The Contractor shall cause its insurer(s) to issue endorsements acceptable to the City of Peoria to add the City of Peoria as an Additional Insured on the policies set forth above with respect to any liability of the City of Peoria arising out of the performance of the Work, any ongoing operations, any Work, or any activities by the Contractor under the Contract.
 7. Comprehensive general liability insurance shall include independent Contractors' protective liability, products and completed operations broad form property damage coverage. The completed operations and products liability shall be maintained for two years after final payment.
Certificate Holder Address
City of Peoria
419 Fulton Street
Peoria, Illinois 61602
 8. The insurance required above shall include contractual liability insurance coverage for the Contractor's obligations to hold harmless and indemnify the City as specified herein.

1.7 EQUAL EMPLOYMENT OPPORTUNITY

- A. To be awarded a contract all Suppliers, Vendors, Contractors to the City of Peoria and / or County of Peoria must be registered in the City of Peoria's Contract Compliance Program and have a current Equal Employment Opportunity (EEO) certification number. This program is unrelated to any State and Federal program. To obtain or renew a number an Employer Report Form CC-1, and a copy of your company's sexual harassment policy statement (if a first-time applicant), and a \$50 processing fee must be submitted to the City's Equal Opportunity Manager. The only exception to payment of the processing fee is neighborhood associations. Though the form may be included in the bid package, it can be requested on-line from the City's website: <http://www.peoriagov.org/equal->

opportunity/equal-opportunity-forms/. The forms can also be obtained by writing or calling:

City of Peoria
Equal Opportunity Manager
419 Fulton Street
Peoria, Illinois 61602
(309) 494-8530 Voice

- B. Although all vendors are encouraged to obtain EEO certification, vendors do not need an EEO certification to respond to a Bid proposal. The EEO certification number is only required prior to the award of a Contract.

1.8 GOOD FAITH OPPORTUNITY

- A. For projects exceeding \$50,000, the Bidder shall meet the following good faith effort requirements:

1. Bidders must demonstrate that they made good faith efforts to meet Minority/Women Business Enterprise (M/WBE) participation goals. Documentation supportive of their good faith efforts to utilize M/WBEs must be submitted with the Bidders proposal.
2. The Contractor and its Subcontractors must provide to the City of Peoria documentation on their good faith efforts to comply with minority / female worker workforce utilization participation goals. This would include, but not limited to, weekly certified payroll reports. All information will be provided through **ePrismSoft**, an electronic web-based compliance tracking software. Access to **ePrismSoft** has been furnished by the City of Peoria. To activate access, the Contractor and Subcontractors must contact Human Capital Development.

Human Capital Development, LLC

309-692-6400

gabe@humancapitaldev.com

www.humancapitaldev.com

1.9 CONSOLIDATED APPROPRIATIONS ACT

- A. This project is supported by federal funds and must follow the following guidelines in accordance with the Consolidated Appropriations Act 2022:

1. Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (2 CFR Part 200). The requirements of 2 CFR Part 200 apply to all CPF awards. Grantees are encouraged to review the provisions of these regulations including provisions related to:
 - a. Suspension and debarment at 2 CFR 200.214
 - b. Prohibition on certain telecommunications and video surveillance services or equipment at 2 CFR 200.216
 - c. Financial management, internal controls, and Federal payment requirements at 2 CFR 200.302, 200.303, and 200.305
 - d. Program Income requirements at 2 CFR 200.307*

- e. Revision of budget and program plans at 2 CFR 200.308 Disposition of property acquired with CPF funds at 2 CFR §200.311 Procurement requirements at 2 CFR §200.317-327
- f. Record retention and access requirements at 2 CFR 200.334- 200.338
- g. Reporting requirements at 2 CFR 200.328-200.330, including on the status of property acquired with CPF funds at 2 CFR §200.330
- h. Subrecipient monitoring and management at 2 CFR 200.331- 200.333
- i. Remedies for Noncompliance at 2 CFR 200.339- 200.343
- j. Closeout of federal grants at 2 CFR §200.344-346
- k. Cost Principles at 2 CFR Part 200, subpart E
- l. Audit requirements at 2 CFR Part 200, subpart F

*For purposes of all CPF awards, program income must be used for the purposes and under the conditions of the grantee's specific CPF award in accordance with the addition requirements at 2 CFR 200.307(e)(2). In accordance with 2 CFR 200.307(b), costs incidental to the generation of program income may be deducted from gross income to determine program income for purposes of your CPF grant, provided these costs have not been charged to the Federal award. Further technical assistance will be provided to grantees with projects that may generate program income.

- 2. Economic Opportunities for Low-and Very Low-income Persons: Section 3 Requirements (24 CFR Part 75) and Indian Preference
 - a. The requirements of Section 3 of the Housing and Urban Development Act of 1968 found at 24 CFR Part 75 apply to all grant recipients that are awarded \$200,000 or more for projects involving housing construction, rehabilitation, or other public construction. Section 3 of the Housing and Urban Development Act of 1968 (Section 3), 12 U.S.C. 1701u (Economic Opportunities for Low- and Very Low-Income Persons in Connection with Assisted Projects), and the HUD regulations at 24 CFR Part 75, ensure, to the greatest extent feasible, that training, employment, contracting and other economic opportunities be directed to low- and very low-income persons, especially recipients of government assistance for housing, and to businesses that provide economic opportunities to low-and very low-income persons where a proposed project is located.
- 3. Generally Applicable HUD Requirements (24 CFR Part 5, subpart A and 24 CFR 1000.12)
 - a. CPF grantees and their subrecipients must comply with the generally applicable HUD and CPD requirements in 24 CFR Part 5, subpart A, including all applicable fair housing, and civil rights requirements. Grants to Tribes and TDHEs are subject to the nondiscrimination requirements in 24 CFR 1000.12 in lieu of the nondiscrimination requirements in 24 CFR 5.105(a).
- 4. Davis Bacon and Related Acts (DBRA)
 - a. Compliance with Davis Bacon and Related Acts (DBRA) is not a condition or requirement for CPF grants but may be required if your project is also supported by other funds which do require adherence to the DBRA.

5. Suspension and Debarment
 - a. The governmentwide debarment and suspension regulations in 2 CFR Part 180 apply as incorporated and supplemented by HUD's implementing regulations in 2 CFR Part 2424. These regulations restrict awards, subawards, and contracts with certain parties that are debarred, suspended, or otherwise excluded from or ineligible for participation in Federal assistance programs or activities.
6. Conflicts of Interest
 - a. Conflicts Subject to Procurement Regulations. In the procurement of property or services by recipients and subrecipients, the conflict-of-interest rules in 2 CFR 200.317 and 2 CFR 200.318(c) shall apply. In all cases not governed by 2 CFR 200.317 and 2 CFR 200.318(c), recipients and subrecipients must follow the requirements contained in paragraphs ii-v below.
 - b. General prohibition. No person who is an employee, agent, consultant, officer, or elected or appointed official of the recipient or subrecipient and who exercises or has exercised any functions or responsibilities with respect to assisted activities, or who is in a position to participate in a decision making process or gain inside information with regard to such activities, may obtain a financial interest or benefit from the activity, or have a financial interest in any contract, subcontract, or agreement with respect thereto, or the proceeds thereunder, either for himself or herself or for those with whom he or she has immediate family or business ties, during his or her tenure or for one year thereafter. Immediate family ties include (whether by blood, marriage or adoption) the spouse, parent (including a stepparent), child (including a stepchild), brother, sister (including a stepbrother or stepsister), grandparent, grandchild, and in-laws of a covered person.
 - c. Exceptions. HUD may grant an exception to the general prohibition in paragraph (ii) upon the recipient's written request and satisfaction of the threshold requirements in paragraph (iv), if HUD determines the exception will further the Federal purpose of the award and the effective and efficient administration of the recipient's program or project, taking into account the cumulative effects of the factors in paragraph (v).
 - d. Threshold requirements for exceptions. HUD will consider an exception only after the recipient has provided the following documentation: a. A disclosure of the nature of the conflict, accompanied by an assurance that there has been public disclosure of the conflict and a description of how the public disclosure was made; and b. An opinion of the recipient's attorney that the interest for which the exception is sought would not violate state or local law.
 - e. Factors to be considered for exceptions. In determining whether to grant a requested exception after the recipient has satisfactorily met the threshold requirements in paragraph (iii), HUD will consider the cumulative effect of the following factors, where applicable: a. Whether the exception would provide a significant cost benefit or an essential degree of expertise to the program or project that would otherwise not be available; b. Whether an opportunity was provided for open competitive bidding or

- negotiation; c. Whether the person affected is a member of a group or class of low- or moderate-income persons intended to be the beneficiaries of the assisted activity, and the exception will permit such person to receive generally the same interests or benefits as are being made available or provided to the group or class; d. Whether the affected person has withdrawn from his or her functions or responsibilities, or the decision-making process with respect to the specific assisted activity in question; e. Whether the interest or benefit was present before the affected person was in a position as described in paragraph (ii); f. Whether undue hardship will result either to the recipient or the person affected when weighed against the public interest served by avoiding the prohibited conflict; and g. Any other relevant considerations.
- f. Disclosure of potential conflicts of interest. Recipients must disclose in writing to your CPF Grant Officer any potential conflict of interest.
7. Build America, Buy America:
- a. Recipients of an award of Federal financial assistance from a program for infrastructure are required to comply with the requirements of the Build America, Buy America (BABA) Act. Pursuant to the General Applicability Waiver of Build America, Buy America Provisions as Applied to Recipients of HUD Federal Financial Assistance (87 FR26219), any funds obligated on or after November 14, 2022, must comply with section 70914 of the Act.

1.10 MODIFICATION OR WITHDRAWAL OF BIDS / PROPOSALS

- A. No alterations in proposals or in the printed forms therefore, by erasures, deletions, or interpolations, will be acceptable.
- B. Changes in or additions to the Bid form, recapitulations of the Work bid upon, alternative proposals, or any other modifications of the Bid form, which are not specifically called for in the Contract Documents, may result in the Owner's rejection of the Bid as not being responsive to the invitation.
- C. Bidders unable or unwilling to submit a Bid should immediately return the Section 00 41 14 – Statement of No Bid Form. Any vendor not submitting a Bid is encouraged to indicate the reason for not participating.

1.11 FALSE STATEMENTS IN BIDS

- A. Bidders must provide full, accurate, and complete information as required by the solicitation.

1.12 SUBMISSION OF BIDS

- A. The Bidder must Bid on all items contained in the Bid schedule. The Owner contemplates award of a lump sum contract based on the Bid form included in Section 00 41 13 – Lump Sum Pricing Schedule.

- B. The Bid must be signed by the Bidder with their usual signature. Bids by partnerships must be signed with the partnership name by one of the members of the partnership, or by an authorized representative, followed by the signature and title of the person signing. Bids by corporations must be signed with the name of the corporation, followed by the signature and title of person authorized to bind it on the matter. All signatures must be in ink.
- C. By signing the Bid, the Bidder, including Subcontractors, is certifying the following:
 - 1. They have not been barred from bidding by Federal, State or Local governments and has not been suspended or debarred from receiving federal funding.
 - 2. They have not been barred from bidding as a result of a conviction for the violation of State of Illinois laws prohibiting bid-rigging or bid-rotating per Public Act 720 ILCS 5-33E-3 and 5/33E-4.
 - 3. There has been no collusion in the preparation and submittal.
 - 4. They are not delinquent in the payment of any indebtedness, tax, fee, liens, fines owed or accruing to the City of Peoria or in the payment of any tax administered by the Illinois Department of Revenue and is in compliance with the terms and conditions of Section 10-109 of the Peoria City Code; and 65 ILCS 5/11-42.1-1.
- D. By submitting a Bid for the Work, the Contractor (and proposed Subcontractors) represents itself as knowledgeable and capable in the performance of the Work and can supply all necessary expertise, labor, equipment, materials, and supplies necessary to complete and fully finish the scope of Work, whether specifically detailed or not.
- E. The Bidder shall be responsible for delivery of their Bid to the Owner before the date and hour set for receipt of Bids. Two (2) copies of all Bid proposals are to be mailed or delivered to the City Purchasing Manager, Room 108, City Hall, 419 Fulton Street, Peoria, Illinois, 61602. All Bids will be in English. Bids will not be accepted by FAX, e-mail, internet, telephone or telegraphic means. The City Purchasing Manager can be contacted at (309) 494-8507. Late Bids will not be considered and will be returned unopened.
- F. Bidders shall submit their proposal in a sealed envelope (sealed bid) which shall be clearly labeled with the company name and address. Bidders are requested to indicate in the lower left-hand corner of their envelope the item being bid, Bid number, date and time the Bid is due.
- G. Bids sent via "Express Mail" must have Bid number and due date on the outside of the outermost express envelope. Bidder must allow sufficient time for the processing through the Owner's internal mailroom system. Bidders must consider the Owner is not responsible for late delivery of mail through outside mail delivery resources. Bids should be sent in a timely fashion to avoid late delivery.
- H. Proposers may withdraw their proposals at any time prior to the Bid closing time by telephone, fax or written request. A telephone request must be confirmed in writing within 24 hours of the call and prior to closing time. No Bidder shall withdraw their Bid for a period of sixty (60) calendar days from the Bid opening date. Negligence on the part of the Bidder

in preparing a proposal confers no right of withdrawal or modification of a proposal after it has been opened

1.13 BID DUE DATE

- A. Complete Bid submittal for this request is due at 4:00 PM CST on November 7, 2022.
- B. The RFP closing time will be based upon Central Standard Time or Central Daylight Time, whichever is in effect on the date the Bid is due.
- C. It shall be the sole responsibility of the Bidder to assure their Bid is delivered prior to the stated date and time.

1.14 INTERVIEWS

- A. Following receipt of bids, the Owner, at their discretion, may request an interview with the Bidder to discuss the Bidder's proposal. Interviews will be setup by Owner at the Jobsite on a mutually agreeable date.

1.15 EVALUATION AND ACCEPTANCE OF BIDS

- A. Notwithstanding anything contained herein to the contrary, the Owner reserves the right to accept or reject any and all Bids. The Owner also reserves the rights to waive any irregularities contained in any proposal or any requirement of this RFP. Proposals that include assumptions more favorable to the Bidder (and hence, less favorable to the Owner) may be rejected on that basis.
- B. The Owner may reject a Bid as non-responsive if the prices on the Bid form are materially unbalanced between line items or sub-line items. A Bid is materially unbalanced when it is based on prices significantly less than cost of some Work and prices which are significantly overstated in relation to cost for other Work, and if there is a reasonable doubt that the bid will result in the lowest overall cost to the Owner even though it may be the low evaluated Bid, or if it is so unbalanced as to be tantamount to allowing an advanced payment.
- C. By submitting a response, each Bidder acknowledges that the Owner is not bound by any competitive pricing protocols and each Bidder waives any right to challenge or dispute the processes and procedures used by the Owner or the decisions of the Owner in the selection of a party with which the Owner may elect to negotiate. The Bidder specifically disclaims any right or interest in the property a result of its receipt of this RFP or allegedly triggered by providing any response hereto. It is specifically acknowledged by the Bidder that submits a response to this RFP that, until and unless a definitive agreement is executed by such party and the Owner and such agreement is approved by the Owner, the Owner shall not be bound.
- D. The Owner will evaluate Bids in response to this solicitation with or without discussions and will award a Contract to the responsible Bidder whose Bid, conforming to the solicitation, will be most advantageous to the Owner, considering the following evaluation criteria:

Category	Weight %
Pricing / Cost	45
Safety	20
Experience	20
Proposal (specification conformance and innovative approach) and Proposed Timeline	15

1.16 CONTRACT TERMS AND CONDITIONS

A. Indemnity

1. Upon Contract award, the Contractor shall, at all times, fully indemnify, hold harmless, and defend the City of Peoria and its officers, agents, and employees from and against any and all claims and demands, actions, causes of action, and costs and fees of any character whatsoever made by anyone whomsoever on account of, or in any way growing out of, the performance of the Contract or the Work by the Contractor, its employees, agents, or Subcontractors, or because of any act or omission, neglect, or misconduct of the Contractor, its employees, agents, or subcontractors, including, but not limited to, any claims that may be made by the Contractor's employees themselves for injuries to their person or property or otherwise.
2. Such indemnity shall not be limited by reason of the requirement of any insurance coverage herein provided. Nothing contained herein shall be construed as prohibiting the City of Peoria, its officers, agents, or its employees, from defending through its selection and use of its own agents, attorneys, and experts, any claims, actions, or suits brought against it. The Contractor shall likewise be liable for the costs, fees, and expenses incurred in the city of Peoria's or the Contractor's defense of any such claims, actions, or suits. The Contractor shall be responsible for any damages incurred as a result of its errors, omissions, or negligent acts and for any losses or costs to repair or remedy the Work as a result of its errors, omissions, or negligent acts.
3. The Contractor agrees to protect, defend and save the City of Peoria harmless against any demand for payment for the use of any patented material process, article or device that may enter into the manufacture, construction or form a part of the Work covered by the Contract.
4. In addition to the Contractor's obligation to indemnify the City of Peoria under the Contract, The Contractor specifically acknowledges and agrees that it has an immediate and independent obligation to defend the City of Peoria from any claim which actually or potentially falls within such indemnification provision, even if the allegations are or may be groundless, false, or fraudulent, which obligation arises at the time such claim is tendered to the Contractor by the City of Peoria and continues at all times thereafter.

- B. The Contract will be subject to and governed by the rules and regulations of the Illinois Human Rights Act 775 ILCS 5/1-101 et seq. and as amended, and the provision of 775 ILCS 5/2-105 on sexual harassment written policies.

- C. In case of default by the Contractor, the City will procure the articles or services from other sources and hold the Contractor responsible for any excess cost incurred.
- D. The City of Peoria reserves the right to cancel the whole or any part of the Contract, if the Contractor fails to perform any of the provisions in the Contract or fails to make delivery within the time stated. The cancellation notice will be written and delivered by certified mail to the Contractor's address on record. In the event the Contract is canceled, "the vendor may be declared an irresponsible vendor by the City Manager and as a result may be disqualified from doing business with the City of Peoria for the period of one year in accordance with City Ordinance Section 10-102. The Contractor will not be liable to perform if situations arise by reason of strikes, acts of God or the public enemy, acts of the City or Peoria, fires or floods.
- E. The Contractor agrees to furnish the material or services according to the City's plans, specifications and conditions and at prices specified hereon.
- F. The Contractor shall obtain, at its own expense, all necessary insurance with regard to its fiduciary responsibility to the City of Peoria. Said Bidder shall indemnify and hold harmless the City of Peoria, its officials, officers, directors, employees, heirs and assigns from any and all actions, claims, demands or suits at law or equity for damages, costs, loss or other injury as a result of the contract. The City of Peoria does not assume any liability for acts or omissions of Contractor and such liability rests solely with Contractor.
- G. Certificates of insurance acceptable to the City of Peoria indicating insurance required by the Contract is in force shall be filed with the City of Peoria prior to contract approval by the City. These certificates shall contain a provision that coverage afforded under the policies will not be canceled until at least thirty (30) days prior written notice has been given to the City of Peoria.
- H. The Contract will be governed by the laws of the State of Illinois. The Contractor agrees that Chapter 10 of the Code of the City of Peoria is hereby incorporated by reference, as if set out verbatim.
- I. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual harassment, ancestry, national origin, place of birth, age or a physical or mental disability which would not interfere with the efficient performance of the job in question. The Contractor will take affirmative action to comply with the provision of this division and will require any Subcontractor to submit to the City written commitment to comply with this division. The Contractor will distribute copies of this commitment to all persons who participate in recruitment, screening, referral and selection of job applicants, prospective job applicants, member or prospective subcontractors.
- J. The Contractor agrees that the provision of Division 4 of Article III of Chapter 17 of the Code of the City of Peoria is hereby incorporated by reference, as if set out verbatim.

K. Employment Restrictions – The Contractor

1. The Contractor agrees, as a condition of accepting the Contract with the City of Peoria, that, for a period of one (1) year following completion of the Contract, it shall be prohibited from hiring, directly or indirectly, any City employee or official who was involved, directly or indirectly in:
 - a. The selection and / or recommendation to select the Contractor for performance of this Contract
 - b. Coordinating the efforts of the Contractor in the consummation or completion of this Contract
 - c. Monitoring or determining the performance of the Contractor
2. The Contractor further acknowledges and agrees that, upon the City's determination that a violation of this provision has occurred, the penalty imposed, at the sole discretion of the City, may include one or more of the following:
 - a. Cancellation of any other contract(s) between the City of Peoria and the Contractor
 - b. Disqualification of the Contractor from bidding or being awarded future contracts with the City of Peoria for a period of two (2) years
 - c. Payment of liquidated damages to the City of Peoria in the amount of twenty-five thousand dollars (\$25,000.00).

L. All of the Contract terms shall be incorporated by reference into any written contract.

1.17 OTHER REQUEST FOR PROPOSALS

- A. The Owner is soliciting proposals for the abatement, demolition, and restoration of the former McKinley School located at 1201 West Adrian G. Hinton Avenue in Peoria, Illinois under a separate RFP. Submitting a Bid on this RFP does not exclude the Bidder from submitting a bid for the Former McKinley School RFP. The Owner will award separate contracts for each RFP but may contemplate awarding both contracts to the same Contractor under the following criteria:
1. The Bidder whose bids, conforming to each solicitation, will be most advantageous to the Owner, considering the specified evaluation criteria in each RFP
 2. The Bidder (with proposed Subcontractors) has the resources (personnel, workers, equipment, and materials) to complete both projects, whether concurrently or consecutively, within the milestone schedule established for each project
- B. The Owner is not obligated to award both solicitations to one Bidder even if the Bidder meets the selection criteria for both solicitations.

PART 2 – PRODUCTS

2.1 BIDDER'S PROPOSAL

- A. The following submittals will be required for the Bid to be considered as a complete proposal and facilitate a full Bid / proposal evaluation. The Bidder's proposal will be considered nonresponsive if any of the following items are not received:

1. Completed Bid schedule as provided in Section 00 40 00 – Bid Forms and Supplements. Lump sum pricing shall include all costs and expenses incurred or damages sustained, and for each and every other matter, thing or act performed, furnished or suffered in connection with the abatement, demolition and restoration of the Jobsite.
 - a. The City of Peoria is exempt, by law, from paying State and City Retailers Occupation Tax, State Service Occupation Tax, State Use Tax and Federal Excise Tax. The City of Peoria will execute tax exemption certificates whenever required. The prices should be exclusive of all taxes. In the event the price includes taxes, the Bidder must show the amount of tax included in the price.
2. Construction Schedule
 - a. Bidder shall provide a preliminary construction schedule for the following activities, at a minimum:
 - i. Preparation and submittal of Work plans and permits
 - ii. Mobilization
 - iii. Jobsite preparation
 - iv. Abatement and regulated material removal
 - v. Above-grade demolition
 - vi. Below-grade demolition
 - vii. Jobsite restoration
 - viii. Demobilization
 - b. The schedule shall include the proposed number of days required to complete the major Work activities and must make clear all assumptions that define the overall sequence and duration of the proposed schedule. For major Work activities the schedule shall define activity relationships and include start and finish dates (in calendar days).
3. Draft Execution Work Plan
 - a. Bidder shall submit with its Bid a draft Work plan outlining the Contractor's general approach and means and methods for all phases of the Work.
 - b. The Bidder's Work plan shall be structured to correlate with the construction schedule.
 - c. The plan shall be written to provide clear and concise descriptive summaries of the Bidder's plan to execute all Work tasks contained in the Work and should be structured with the following major sections:
 - i. Pre-construction submittals and permitting
 - ii. Jobsite Preparation Activities
 - 1) Procedures and equipment to be employed to control dust and vibration
 - 2) Procedures to be followed to verify and perform utility isolation
 - 3) Proposed equipment laydown and stockpile locations
 - 4) Proposed trucking route
 - iii. Asbestos Abatement and Regulated Material Removal
 - 1) Planned sampling approach to further confirm presence / absence of ACM and lead and PCBs in paint on intact surfaces and in debris on floor and other surfaces

- 2) Procedures to be followed to abate ACM in conjunction with lead- and PCB-containing materials, especially debris on floor and other surfaces
- 3) Procedures to be followed to remove lead- and PCB-containing materials
- 4) Procedures to be followed to remove other regulated materials
- iv. Above Grade Demolition
 - 1) Procedures to be followed / methodology to demolish portions of the structure where pre-demolition abatement of ACMs and lead and PCBs in paint may not be possible
 - 2) Procedures to be followed / methodology to demolish the remaining portions of the structure
- v. Below Grade Removal / Abandonment
 - 1) Procedures to be followed / methodology to remove below grade features
- vi. Water Management
 - 1) Procedures to be followed / methodology to manage (collect, store, sample, treat, and disposal / discharge) water generated or encountered during the Work, including:
 - a) Abatement shower water
 - b) Wash down water
 - c) Storm water and infiltrated groundwater in excavations
 - d) Storm water and infiltrated groundwater in the basement
- vii. Procedures to be followed for waste characterization
- viii. Procedures to be followed for transportation and disposal of abatement, demolition, and regulated waste and transportation and recycling of recyclables
- ix. Proposed waste and recyclable material transporters and disposal facilities, including for asbestos waste, PCB waste, universal waste, hazardous waste, and construction and debris waste
- x. Jobsite Restoration
 - 1) Procedures to be followed to backfill the demolished basement and excavations
 - 2) Procedures to be followed / methodology to restore the Jobsite
- xi. Construction and post-construction submittals
- d. The plan should not be longer than 50 pages.
4. Key Personnel
 - a. Bidder shall provide an organization chart and specify the name of its intended senior company representative, Project Manager, field superintendent, Jobsite health and safety and quality assurance / quality control (QA/QC) professional.
 - b. Resumes for the key personnel shall be included.

- c. The selected Bidder shall not change the Project Manager or field superintendent for the duration of the job without the Owner's review and written permission.
 5. Schedule of Values
 - a. Bidder shall submit a proposed schedule of values (monthly cost forecast) for the job that coincides with the construction schedule and proposal.
 6. Bidder Qualifications
 - a. Bidder shall provide a completed qualification form. The qualification form is provided in Section 00 45 13 – Bidder Qualification Form.
 - b. Bidder shall provide a current certificate of insurance showing limits of coverage, a copy of the company's current workers' compensation certificate, and proof that the Bidder's insurance carriers are licensed / certified to do business in the State of Illinois.
 7. List of Subcontractors
 - a. Bidder shall provide a list of all major Subcontractors (contract value of \$100,000 and greater) that the Bidder intends to contract with, along with a description of the Work / service the Subcontractor will perform.
 - b. Subcontractors shall be listed on the form provided in Section 00 43 36 – Proposed Subcontractors Form.
 - c. A qualification form shall be completed for major Subcontractors (contract value of \$200,000 and greater) that the Bidder intends to contract with. The qualification form is provided in Section 00 45 13 – Bidder Qualification Form.
 - d. The Owner reserves the right to reject any and all Subcontractors listed by the Bidder.
 8. Contractor Rates
 - a. Bidder shall submit rate sheets for labor (supervisory, operators, laborers, etc.), equipment, and materials that will be utilized for the Work or may be utilized in Owner-directed extra Work. A summary of markups shall also be included.
 9. Clarifications and exceptions taken by the Bidder on any aspect of the Work (technical) or contract (commercial) shall be listed on the forms provided in Section 00 46 00 – Clarifications and Exceptions.
- B. The Owner requests inclusion of the names of waste transporters and disposal facilities in the Bidder's proposal to allow the Owner to provide an initial review prior to award of the project. Without the submission of the names of the transporters and disposal facilities, the Contractor must be prepared for a proposed transporter and / or disposal facility to be rejected. Additional costs, if any, for use of alternate transporters and / or disposal facilities will be borne by the Contractor and not the Owner. However, it is the Owner's expectation that if the proposed transporter(s) and disposal facility are approved by applicable State agencies and the US Environmental Protection Agency to transport and dispose generated waste that is properly classified, the proposed transporter / disposal facility will be approved by the Owner.

- C. Statements made in the Bidder's proposal documentation that are in contradiction to regulatory requirements, Contract Documents, or requirements of the Technical Specifications shall not constitute acceptance of such statements in the event the Bidder is awarded the project. Regulatory requirements, Contract Documents, and requirements of the Technical Specifications supersede Bidder's provided assumptions unless a waiver of the requirement / term is provided by the Owner.
- D. The intent of the documents requested as part of the Contractor's Bid is to provide a high-level understanding of the Contractor's planned execution of the project, progress, and cash flow. A revision of these documents requiring additional level of detail will be required following contract award, as specified in Section 01 35 13 – Special Project Procedures and other sections of the Technical Specifications.
- E. If the Bidder intends to bid on both this solicitation and the former McKinley School solicitation, the Bidder shall indicate the following in their proposal:
 - 1. The Bidder is seeking award for only one solicitation (i.e., does not have the resources to complete both)
 - 2. If the Bidder is seeking award for both solicitations, the Bidder shall indicate the following in their proposal:
 - a. The Bidder has the resources (personnel, workers, equipment, and materials) to complete both projects concurrently, **OR**
 - b. The Bidder has the resources (personnel, workers, equipment, and materials) to complete both projects consecutively
 - c. The Bidder's proposed cost credit for being awarded both contracts

PART 3 – EXECUTION (Not used)

END OF SECTION

SECTION 00 40 00 – PROCUREMENT FORMS AND SUPPLEMENTS

PART 1 – GENERAL

1.1. REQUIREMENTS

- A. Forms must be completed per requirements set forth in Section 00 21 00 – Instructions to Bidders, and as identified herein.

1.2. REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
 - 1. Section 00 21 00 – Instructions to Bidders
 - 2. Section 00 41 13 – Lump Sum Pricing Schedule
 - 3. Section 00 43 36 – Proposed Subcontractors Form
 - 4. Section 00 45 13 – Bidder Qualification Form (For Subcontractors)
 - 5. Section 00 46 10 – Commercial Clarifications and Exceptions
 - 6. Section 00 46 20 – Technical Clarifications and Exceptions

1.3. SUBMITTALS

- A. Completed bid form: Section 00 41 13 – Lump Sum Pricing Schedule.
- B. List of proposed Subcontractors: Section 00 43 36 – Proposed Subcontractors Form.
- C. Qualifications for Contractors and Subcontractors: Section 00 45 13 – Bidder Qualification Form.
- D. Clarifications and exceptions to the commercial terms and conditions of the Request for Proposal (RFP): Section 00 46 10 – Commercial Clarifications and Exceptions.
- E. Clarifications and exceptions to the technical requirements of the RFP: Section 00 46 20 – Technical Clarifications and Exceptions.

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION (Not used)

END OF SECTION

**REQUEST FOR PROPOSAL
SECTION 00 41 13 - Lump Sum Pricing Schedule
Former Harrison School
City of Peoria, Illinois**

Contractor Name: _____

INSERT ALL INFORMATION IN BLUE CELLS

FIRM LUMP SUM PRICE F.O.B. destination for supply and services for the specified abatement, dismantling, demolition, and restoration in accordance with all conditions of the Request for Proposal and City of Peoria's Purchase Order, including freight. Without limitation, this price shall include overhead, profit, all travel and living expenses, shall be firm, and is not subject to increase due to changes in the cost of labor or materials, or to any other factor, except changes.

Insert pricing in this column

SECTION 01 20 00-1.5	The Total Firm Lump Sum Price (Enter into the Bid Proposal Pricing and Instructions Form)	\$ _____ -	
	PRICE BREAKDOWN		
	Initiation	\$ _____ -	
	A.1 General Requirements		
	A.2 Payment and Performance Bond		
	Mobilization and Jobsite Preparation	\$ _____ -	
	B.1 Mobilization and Jobsite Preparation		
	Asbestos Abatement and Regulated Material Removal	\$ _____ -	
	C.1		
	Miscellaneous and Unknown Chemical Removal, Transport and Disposal		
	C.2 Nonhazardous Waste Collection, Transport and Disposal		
	C.3 Universal Waste Collection, Transport and Recycling		
	C.4 Hazardous Waste Collection, Transport and Disposal		
	C.5 PCB Removal, Transport and Disposal		
	C.6 ACM Abatement, Transport and Disposal		
	Building Demolition	\$ _____ -	
	D.1 Building Demolition		
	D.2 Construction and Debris Waste Transport and Disposal		
	D.3 Recyclable Materials Transport		
	D.4 Recycling of Recyclable Materials (CREDIT)		
	Jobsite Restoration and Demobilization	\$ _____ -	
	E.1 Backfill - Imported Fill		
	E.2 Backfill - Imported Topsoil		
	E.3 Seeding		
	E.4 Demobilization		
	Closeout Submittals	\$ _____ -	
	F.1 Final Submittals		

TAXES

The Bidder shall confirm that no tax has been included in the price of tangible personal property or services by writing "No Tax Included"

CONFORMITY WITH PROPOSAL DOCUMENTS

The Bidder hereby certifies that he agrees to all provisions of the Technical Specifications and Contract Documents unless exceptions are specifically and clearly listed in the proposal and identified as Exceptions. The Bidder's printed terms and conditions are not considered specific exceptions.

Contractor Signature

Section 00 41 14 - Statement of No Bid Form

Business Confidential

Site: Former Harrison School, City of Peoria, Illinois

Company

We are declining to bid for the following reason:

Check all that apply	Response
	Unable to meet scope requirements
	Requirements are unclear or restrictive (explain in remarks)
	Unable to meet required delivery or performance date
	Unable to meet insurance requirements
	Unable to meet bonding requirements
	Insufficient time to respond to the solicitation
	Do not offer requested commodity or service, please remove our name from the City of Peoria's bidders list for this type of commodity or service only
	Other (explain in remarks)
Remarks	

Failure to return form for no bid may result in the removal from the City's bidder's list for the commodity or service requested above.

Section 00 43 36 - Proposed Subcontractors Form

Site: Former Harrison School, Peoria, Illinois

Bidder (Prime Contractor):

Sub	Name of Subcontractor	Proposed Scope of Work	Proposed Contract Value	Submitted Bidder Qualification Form (SECTION 00 45 13) Yes / No
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

SECTION 00 45 13 – BIDDER QUALIFICATION FORM

SECTION 1 COMPANY INFORMATION

1.1 Enter company contact information.

Company Name	
Physical Address	
Mailing Address (if different than above)	
Contact Name	
Contact Phone Number	
Contact Email	
Company Website Address	

1.2 What is the legal status of the business/company?

Corporation		Date/State Organized:	
Partnership		Date/State Organized:	
Joint Venture		Date/State Organized:	
LLC		Date/State Organized	
Privately Held		Date/State Organized:	
Parent Company			

1.3 What is the designation of the business/company?

DESIGNATION	YES	NO
Small Business (SB)		
Small Disadvantaged Business (SDB)		
Woman Owned Small Business (WOSB)		
HUB Zone Small Business (HUB)		
Service Disabled Veteran Owned Small Business (SDVOSB)		
Veteran Owned Small Business (VOSB)		
Minority Owned (51%)		
Women Owned (51%)		
If yes, with which organization did the company receive the business qualification registration? Please provide a copy.		

1.4 Describe the nature of the business, please attach a copy of the last Annual Report and a Company Brochure.

1.5 How long has the company been engaged in the type of business noted in Section 1.3 above?

1.6 List the company's professional affiliations and licenses held.

1.7 Is the company an Equal Opportunity Employer?

YES NO

1.8 Does the company have a written Drug and Alcohol Policy?

YES NO If yes, please provide a copy of this Policy.

If yes, does the company require subcontractors to comply with the Drug and Alcohol Policy?

YES NO

SECTION 2 FINANCIAL INFORMATION

2.1 Enter the company's Annual Sales Volume for the last four years, in USD \$1,000.

	2021	2020	2019	2018
Total				

2.2 What is the company's largest contract completed to date?

2.3 What is the company's current project backlog?

2.4 Enter the company's bonding limit and bonding rate (total and per single project).

Bonding Limit, Total (\$)	
Bonding Limit, Per Single Project (\$)	
Current Work Bonded (\$)	
Bonding Company Name	
Bonding Company Address	
Bonding Company Telephone No.	
Bonding Company Contact	
Bonding Rate	
Does Bonding Company Appear on the U.S. Treasury List?	

2.5 What financial guarantees is the bidder providing for performing the scope of work?

Performance Bond	
Letter of Credit	
Parent Company Guarantee	

2.6 Is the company now or has it ever been involved in any bankruptcy or reorganization proceedings?

YES **NO**

2.7 Attach a copy of each of the last two years of audited financial statements (Income Statement, Balance Sheet, and Cash Flow Statement) for the company. If the company does not produce financial statements, please attach the same for the Parent Company.

SECTION 3 INSURANCE INFORMATION

3.1 Enter the company’s normal insurance limits for the following:

POLICY TYPE	VALUE
Worker’s Compensation	
Employer’s Liability	
Each Accident	
Each Employee – Disease	
Policy Limit – Disease	
Commercial General Liability	
General Aggregate	
Products Completed Operations Aggregate	
Personal and Advertising Injury	
Each Occurrence	
Automobile Liability	
Each Occurrence	
Excess/Umbrella Liability	
Each Occurrence	
Other Insurance	

SECTION 4 LEGAL INFORMATION

4.1 Has the company been involved in any legal action within the last five years resulting from a claim by a current or past client/contractor/subcontractor?

YES **NO**

If yes, please provide details and results of each claim.

--

4.2 Are there any judgments, claims, arbitration proceedings or lawsuits pending, outstanding or threatened which the organization or its officers are or have been a party?

YES **NO**

If yes, please explain.

4.3 Has the company filed any lawsuits or requested arbitration with regard to any work the company has done in the last five years?

YES **NO**

If yes, please explain.

4.4 Has the company denied any request or demand for indemnity within the last five years?

YES **NO**

4.5 Has the company been involved in any legal action within the last three years that was in connection with any alleged environmental damage?

YES **NO**

If yes, please provide details and results of claim.

4.6 Has the company defaulted on, or been terminated on any contract within the last five years?

YES **NO**

If yes, please provide description of the event.

4.7 Enter the company's Taxpayer ID No.

SECTION 5 SERVICES PROVIDED INFORMATION

5.1 List the company's top three customers for work experience references.

COMPANY NAME	CONTACT NAME	ADDRESS	CONTACT PHONE	CONTACT EMAIL

5.2 List the company's top three suppliers for work experience references.

SUPPLIER	CONTACT NAME	CONTACT PHONE

5.3 What work does the company typically self-perform versus subcontract with respect to the following activities?

ACTIVITY	SELF-PERFORM OR SUBCONTRACT
Demolition	
Abatement	
Industrial Cleaning	
Excavation	
Air Monitoring	
Trucking	
Site Restoration	

5.4 For the solicited project, what percentage of the company's work/scope will be performed by Subcontractors?

5.5 Typically what percentage of the company's work/scope of supply would come from Illinois-based companies?

SECTION 6 PRIOR EXPERIENCE INFORMATION

6.1 List five major relevant projects the company has completed (or on-going) within the last ten years that are similar to the proposed project.

PROJECT #1	
Name of Project	
Project Owner	
Project Owner Contact Information	
Contractor's Role (Prime/Subcontractor/CM)	
Name of Prime Contractor	
Project Location (Country/State/County/City)	
Contractor's Scope of Work	
Value of Contractor's Scope of Work	
Project Duration	
Project Completion Date	
PROJECT #2	
Name of Project	
Project Owner	
Project Owner Contact Information	
Contractor's Role (Prime/Subcontractor/CM)	
Name of Prime Contractor	
Project Location (Country/State/County/City)	
Contractor's Scope of Work	
Value of Contractor's Scope of Work	
Project Duration	
Project Completion Date	

PROJECT #3	
Name of Project	
Project Owner	
Project Owner Contact Information	
Contractor's Role (Prime/Subcontractor/CM)	
Name of Prime Contractor	
Project Location (Country/State/County/City)	
Contractor's Scope of Work	
Value of Contractor's Scope of Work	
Project Duration	
Project Completion Date	
PROJECT #4	
Name of Project	
Project Owner	
Project Owner Contact Information	
Contractor's Role (Prime/Subcontractor/CM)	
Name of Prime Contractor	
Project Location (Country/State/County/City)	
Contractor's Scope of Work	
Value of Contractor's Scope of Work	
Project Duration	
Project Completion Date	
PROJECT #5	
Name of Project	
Project Owner	
Project Owner Contact Information	
Contractor's Role (Prime/Subcontractor/CM)	
Name of Prime Contractor	
Project Location (Country/State/County/City)	
Contractor's Scope of Work	
Value of Contractor's Scope of Work	
Project Duration	
Project Completion Date	

6.2 List up to four projects the company has completed (or on-going), if any, for the City of Peoria.

PROJECT #1	
Site Name	
Project Contact Information	
Contractor's Role (Prime/Subcontractor/CM)	
Name of Prime Contractor	
Contractor's Scope of Work	
Value of Contractor's Scope of Work	
Project Duration	
PROJECT #2	
Site Name	
Project Contact Information	
Contractor's Role (Prime/Subcontractor/CM)	
Name of Prime Contractor	
Contractor's Scope of Work	
Value of Contractor's Scope of Work	
Project Duration	
PROJECT #3	
Site Name	
Project Contact Information	
Contractor's Role (Prime/Subcontractor/CM)	
Name of Prime Contractor	
Contractor's Scope of Work	
Value of Contractor's Scope of Work	
Project Duration	

PROJECT #4	
Site Name	
Project Contact Information	
Contractor's Role (Prime/Subcontractor/CM)	
Name of Prime Contractor	
Contractor's Scope of Work	
Value of Contractor's Scope of Work	
Project Duration	

SECTION 7 STAFFING INFORMATION

7.1 State the total number of company employees under the following categories related to the Work.

Home Office / Management Staff	
Field Supervisory Staff	
Craft Workers	
Project Management Staff	

7.2 What classification is the company's craft workers?

Union	
Non-Union	
Mix of Union & Non-Union	

7.3 Describe the company's presence in the State of Illinois.

Number of Offices / Locations	
Number of Illinois-Based Employees	

7.4 List additional company locations.

Business Category	Location
Sales	
Manufacturing	
Engineering	
Field Services	
Subsidiaries	

7.5 List any union affiliations of the company.

7.6 List national Union Project Labor Agreements that the company currently works with (i.e., NMA, NCA, etc.).

7.7 List the Principal Officers of the company.

NAME	TITLE	YEARS w/ FIRM

SECTION 8 MAJOR EQUIPMENT INFORMATION

8.1 List the major construction equipment the company owns. Provide an attachment if necessary.

8.2 Does the company have sufficient resources and the ability to mobilize to multiple sites concurrently within the State of Illinois?

YES NO

SECTION 9 LIMITATIONS INFORMATION

9.1 Does the company have any limitations as to state, locality, and local expertise to perform any type of work in the State of Illinois?

YES NO

If yes, please provide contact information.

SECTION 10 SAFETY PROGRAM INFORMATION

10.1 Briefly explain the company's safety program.

10.2 Does the company have a written Safety Manual?

YES **NO**

If yes, please attach the Table of Contents from the company's Safety Manual.

10.3 Does the company have ISNetworld certification?

YES **NO**

10.4 List the company's Experience Modification Rate (EMR); Incident Rate calculated by the number of Reportables x 200,000 / total man-hours; and Frequency Rate calculated by the number of lost time cases and restricted duty cases x 200,000 / total man-hours.

YEAR	MAN-HOURS	EMR	INCIDENT RATE	FREQUENCY RATE
2021				
2020				
2019				
2018				

10.5 List the three most frequent Reportable Incidents reported on construction sites for the company.

YEAR	MOST FREQUENT REPORTABLE	2 nd MOST FREQUENT REPORTABLE	3 rd MOST FREQUENT REPORTABLE
2021			
2020			
2019			
2018			

10.6 Has the company been cited for any OSHA / Illinois OSHA regulation infractions in the last three years?

YES **NO**

If yes, please explain:

10.7 Indicate the number of fatalities the company has experienced during the past three (3) years, plus the current year.

YEAR	NUMBER OF FATALITIES
2022	
2021	
2020	
2019	

10.8 Does the company have a written Corporate Statement concerning Safety and Quality that is signed by the company's CEO/President?

YES NO

If yes, please attach a copy.

10.9 Has the company been inspected by OSHA and other industrial safety enforcement agencies in the past three years, plus the current year?

YES NO

If yes, please explain:

YEAR	NUMBER OF INSPECTIONS
2021	
2020	
2019	
2018	

10.10 Does the company have a written Hazard Communication Plan?

YES NO

If yes, please attach a copy.

10.11 Does the company have disciplinary actions for Safety Violations?

YES NO

10.12 Does the company have a written policy / program for Fitness for Duty that is signed by the company's CEO/President?

YES NO

If yes, please attach a copy.

SECTION 11 QUALITY CONTROL / QUALITY ASSURANCE INFORMATION

11.1 List quality certifications held (e.g., ISO, JIT, Value Engineering, SOW, Six Sigma, Supply Alliances, LEAN, or others).

11.2 Do the company have a written Quality Assurance / Quality Control Program?

YES **NO**

If yes, please attach the Table of Contents from the company's QA/QC Plan/Program.

11.3 Describe the company's methodology for bringing innovation and cost savings opportunities to customers. Please attach separate sheets if necessary.

--

SECTION 12 ENVIRONMENTAL INFORMATION

12.1 Does the company have a written Environmental Protection Plan?

YES **NO**

If yes, please attach.

12.2 Has the company received a Notice of Noncompliance (NON) or a Notice of Violation (NOV) from an environmental agency this year or during any of the three previous years?

YES **NO**

If yes, please explain:

YEAR	NOTICE OF NONCOMPLIANCE / VIOLATION
2021	
2020	
2019	
2018	

12.3 Has the company had any reportable Jobsite spills or releases this year or in any three of the previous years?

YES **NO**

If yes, please explain:

YEAR	TYPE OF SPILL / RELEASE & QUANTITY
2021	
2020	
2019	
2018	

12.4 Does the company maintain inventories of all chemicals at all job sites?

YES NO

12.5 Does the company have a documented plan for providing environmental training to the workers?

YES NO

If yes, please attach a copy.

Signed on behalf of the company: _____

Printed Signature: _____

Title: _____

Date: _____

SECTION 00 46 00 – CLARIFICATIONS AND EXCEPTIONS

PART 1 – GENERAL

1.1. REQUIREMENTS

- A. The Bidder shall submit with their proposal all clarifications and exceptions to the Request for Proposal (RFP) documents on the attached forms. All Bidder clarifications and exceptions shall be listed on the forms. Any deviation from the RFP documents found in the Bidder's proposal text that is not listed in the forms shall be considered unintentional by the Bidder and will be disregarded by Owner.
- B. The Bidder shall indicate the specific Section, Article, and Subpart the clarification or exception applies to and whether the entry is a clarification request ("C") or stated exception ("E"). Examples:
- Section 00 46 00, Article 1.1, Subpart B, Type C (clarification), Please clarify...
- Section 00 46 00, Article 1.1, Subpart B, Type E (exception), The Bidder takes exception to...
- C. All clarification requests provided by Bidders will be responded to by the Owner to all Bidders. Owner clarifications will be provided in Addenda to the RFP. The Bidder's submitted forms will not be shared with other Bidders.
- D. Please be aware, exceptions to the Owner's Contract Terms and Conditions may negatively impact the Bidder's bid evaluation.
- E. Bidder's printed terms and conditions are not considered specific exceptions.

1.2. REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
1. Section 00 21 00 – Instructions to Bidders
 2. Section 00 46 10 – Commercial Clarifications and Exceptions
 3. Section 00 46 20 – Technical Clarifications and Exceptions

1.3. SUBMITTALS

- A. Clarifications and exceptions to the commercial terms and conditions of the RFP: Section 00 46 10 – Commercial Clarifications and Exceptions.
- B. Clarifications and exceptions to the technical requirements of the RFP: Section 00 46 20 – Technical Clarifications and Exceptions.

City of Peoria
Abatement, Demolition, and Restoration

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION (Not used)

END OF SECTION

Section 00 46 10 - Commercial Clarifications and Exceptions Form

Site: Former Harrison School Abatement, Demolition, and Restoration, Peoria, Illinois

Bidder (Prime Contractor):

Item	Specification Section #	Article #	Subpart #	Type (C or E)	Description of Clarification or Exception	Response by Owner
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						

Section 00 46 20 - Technical Clarifications and Exceptions Form

Site: Former Harrison School Abatement, Demolition, and Restoration, Peoria, Illinois

Bidder (Prime Contractor):

Item	Specification Section #	Article #	Subpart #	Type (C or E)	Description of Clarification or Exception	Response by Owner
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						

SECTION 01 10 00 – SCOPE OF WORK

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. Work to be performed is summarized, defined, and otherwise set forth in these Technical Specifications and in various other documents and Drawings that comprise the Contract, hereafter referred to as the "Work." The Work is to be performed for the City of Peoria, Illinois; hereafter referred to as the "Owner." In summary, the Contractor shall abate, demolish, and restore the former Harrison School located at 2702 West Krause Avenue in Peoria, Illinois, being the "Jobsite" as referred to in this Contract. The Jobsite is more fully shown on the Drawings.
- B. Jobsite abatement, demolition, and restoration Work generally includes:
1. Pre-construction submittals and permits
 2. Mobilization and Jobsite preparation
 3. Abatement of asbestos-containing materials (ACM) and removal of other regulated materials
 4. Demolition of designated structures and features
 5. Recyclable material transportation and cost recovery
 6. Waste transportation and disposal
 7. Construction-phase submittals
 8. Jobsite restoration
 9. Post-work submittals
- C. This Section is intended to provide a brief summary of the project and the various elements of Work associated with it. This summary shall be used in conjunction with other noted Sections of the Technical Specifications, the Drawings, and other documents included with the Contract Documents.
- D. This Section does not provide the technical detail for particular Work activities, but describes the Work as a whole, providing an overall perspective to the separate tasks.

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
1. Section 01 14 00 – Work Restrictions
 2. Section 01 20 00 – Price Breakdown
 3. Section 01 32 16 – Contract Milestone Schedule
 4. Section 01 41 00 – Regulatory Requirements
 5. Section 02 00 00 – Existing Conditions

1.3 JOBSITE INFORMATION

A. The former Harrison School is located at 2702 West Krause Avenue, Peoria, Peoria County, Illinois. The building is a former elementary school located in Peoria, and consists of a one to three-story, 32,669 square foot building initially constructed in around 1901. Additions to the building were completed in 1922 and 1949. The building has been vacant for several years and is in overall poor condition, with portions of the building in collapsed or deteriorating state.

B. The following documents are included with these Technical Specifications.

1. Appendix A
 - a. Studies and Surveys
2. Appendix B
 - a. Owner Files and Drawings
3. Appendix C
 - a. Photographs of Items to Be Salvaged

B.C. Provided reports and information are not intended as the Owner's representations of conditions that will be encountered when the Contractor mobilizes to the Jobsite. Provided reports and information summarize conditions observed at the specific times and locations of the investigations.

B.D. Drawings are not intended as the Owner's representation of all underground piping and structures that will be encountered during performance of the Work.

1.4 OBJECTIVE OF THE WORK

A. The requirement of the Work is to completely and safely abate and demolish designated structures and features at the Jobsite, transport and dispose / recycle all materials, and restore the Jobsite in accordance with the Contract Documents. As such, the Contractor shall, except as expressly otherwise provided herein, provide everything necessary to complete the Work, including without limitation all procurement and construction services, labor, materials, facilities, utilities, equipment, tools, and incidentals required to complete the Work.

B. The intent of the Work is to bring the Jobsite to the condition specified in the Technical Specifications and Drawings.

1.5 WORK COVERED

A. The Contractor is to perform everything necessary to bring the Jobsite to the final state required by the Technical Specifications and Drawings unless specifically expressly excluded from the Contractor's scope of Work in the Technical Specifications. The Contractor's Work includes without limitation, the abatement, dismantling, demolition, removal, recycling, disposal, restoration and associated Work set forth below and in the Technical Specifications and Drawings.

- B. A general summary of the Work required for the abatement, demolition, and restoration tasks includes the following. Specific requirements for these tasks are outlined in the Sections that comprise these Technical Specifications. Itemized descriptions of the Work are included in Section 01 20 00 – Price Breakdown.
1. Pre-Construction Submittals and Permits. In general, this task includes preparation of submittals and permits, submission to the Owner, revision of submittals and permits as necessary, submission to necessary Federal, State and local agencies by the Contractor, and paying fees necessary to obtain all permits required by the Contractor to perform the Work. Pre-construction submittals and permits shall include items such as, but not limited to the following:
 - a. Contractor personnel qualifications and training documentation
 - b. Baseline project schedule
 - c. Schedule of values
 - d. Health and safety plan (HASP)
 - e. Permits and notifications. The Contractor shall, if required, obtain the following permits and any other applicable Federal, State, and / or local permit.
 - i. Local (City) permits, including excavation and demolition
 - ii. City of Peoria erosion and storm water permit
 - iii. Illinois Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System Permit for Construction Notice of Intent
 - iv. Illinois EPA / Illinois Department of Public Health Demolition / Renovation / Asbestos Project Notification Form
 - f. Demolition Work plan
 - g. Crane Work plan (if applicable)
 - h. Asbestos Work plan
 - i. Lead Work plan
 - j. Polychlorinated biphenyl (PCB) Work plan
 - k. Water management plan
 - l. Waste management plan
 - m. Fugitive dust and odor control plan
 - n. Erosion and sediment control plan
 - o. Storm water management plan
 - p. Restoration Work plan
 - q. Pre-Work conditions report
 2. Mobilization and Jobsite Preparation. In general mobilization and Jobsite preparation includes, but is not limited to, the following:
 - a. Mobilization of personnel, equipment, tools, and materials
 - b. Verification of active utilities and structures within the limits of Work
 - c. Installation and maintenance of temporary facilities
 - d. Installation and maintenance of temporary utilities
 - e. Installation and maintenance of storm water and soil erosion and sediment controls
 - f. Installation and maintenance of traffic controls
 - g. Installation and maintenance of fugitive dust and odor controls
 - h. Installation and maintenance of decontamination facilities

- i. Coordination with other contractors that may complete other Work at the Site
3. Asbestos Abatement and Regulated Material Removal. In general, this task includes the abatement of ACM, removal of other regulated materials, and removal of flaking paint / coating containing concentrations of lead, ~~other metals and~~ or PCBs prior to demolition of designated structures and features, including waste sorting, storing, and management. Regulated materials that may be present that are the responsibility of the Contractor to remove / abate include, but are not limited to, the following:
 - a. ACM or presumed ACM (PACM)
 - b. Flaking paint / coating containing concentrations of lead, metals, and / or PCBs
 - c. Lead in construction materials
 - d. Mercury-containing devices and bulbs
 - e. Chlorofluorocarbon-containing devices
 - f. Radioactive-containing devices
 - g. Batteries
 - h. Electronic wastes
 - i. Oil-containing devices
 - j. Bulk fluid storage containers
 - k. Other chemical containers
 - l. Brick, block, and refractory material
4. Demolition of Designated Structures and Features. In general, demolition includes:
 - a. Dismantling and demolition of designated structures and features, foundations and basement walls / floors shall be completely removed.
 - b. Removal in full of underground piping encountered during removal of foundations and other below grade features including electrical and data conduit, steam, oil, storm water sewer, sanitary sewer, and water, unless otherwise designated by the Owner to remain.
5. Recyclable Material Transportation and Cost Recovery. In general, this task involves the recovery and recycling of recyclable materials that have monetary value including, but not limited to, the following:
 - a. Concrete, brick, and block, only which is not painted, coated, and has no visual evidence of staining unless otherwise indicated by the Owner
 - b. Piping and associated materials, such as valves and supports
 - c. Specialty metals
 - d. Structural steel
 - e. Miscellaneous steel / metals, such as enclosures, flashing, roofing, and other cold-rolled materials
 - f. Concrete reinforcing steel (i.e., rebar)
6. Waste Transportation and Disposal. In general, transportation and disposal of waste includes waste characterization and packaging all building materials, equipment, and debris and waste materials that cannot be recycled for monetary value (as recyclable materials). The Contractor shall utilize Owner-approved Federal and State Department of Transportation compliant trucks, and Owner-approved disposal facilities.

7. Jobsite Restoration. In general Jobsite restoration includes:
 - a. Importing fill and backfilling and compacting all excavations and sub-grade structures
 - b. Grading of imported fill to achieve positive drainage of storm water
 - c. Importing and grading of topsoil
 - d. Re-vegetating (seeding) of disturbed areas
 - e. Maintaining seeded areas until areas have sufficient growth of vegetation
 - f. Removing erosion and sediment controls
 - g. Repairing any remaining Jobsite features damaged by the Contractor
 - h. Demobilization
 8. Construction-Phase Submittals. In general, this task includes preparation of submittals during construction activities, submission to the Owner for review, and revision of submittals as necessary. Construction-phase submittals shall include items such as, but not limited to, the following:
 - a. Construction schedule – weekly
 - b. Work progress report – weekly
 - c. Permit inspection reports – as required in permits
 - d. Invoicing – monthly
 - e. Waste / recycled material shipping manifests – copies of manifests for materials leaving the Jobsite and final documentation as received by disposal / recycling facility
 - f. Material tracking summaries (recycled materials, construction and demolition debris, waste streams, imported materials, etc.) – weekly / monthly summary
 9. Post-Work Submittals. In general, this task includes preparation of submittals, submission to the Owner for review, revision of submittals as necessary, and submission to necessary Federal, State, and local agencies. Post-work submittals include:
 - a. Remaining ACM summary report (if any)
 - b. PCB summary report
 - c. Construction summary report
 - d. Permit closeout reporting
 - e. Final payment request
- C. Project milestone completion dates are specified in Section 01 32 16 – Contract Milestone Schedule.

1.6 WORK PERFORMED BY OTHERS

- A. The Owner has disconnected main utilities (power, water, and sanitary) to the Jobsite.

1.7 CONTRACTOR ACCESS AND USE OF PREMISES

- B. Access and Work restrictions are outlined in Section 01 14 00 – Work Restrictions.

1.8 FEDERAL, STATE, AND LOCAL REQUIREMENTS

- A. The Contractor shall be responsible for executing the Work in compliance with the Contract Documents and in particular with relevant standards, regulations, and codes including but not limited to:
1. US Department of Labor Occupation Safety and Health Administration standards
 2. US Department of Transportation regulations
 3. US Environmental Protection Agency regulations
 4. National Emission Standards for Hazardous Air Pollutants
 5. National Fire Protection Association standards
 6. National Institute for Occupational Safety and Health standards
 7. Illinois Administrative Code regulations
 8. Illinois Department of Labor regulations
 9. Illinois Department of Natural Resource regulations
 10. Illinois Department of Public Health regulations and licensing requirements
 11. Illinois Department of Transportation regulations
 12. Illinois Environmental Protection Agency regulations
 13. Illinois Occupation Safety and Health Administration standards
 14. Local government authority requirements
 15. Existing Jobsite-specific permit requirements
 16. Requirements of Contractor-obtained permits
 17. Industry standard practices
 18. Manufacturer's requirements or recommendations
 19. Owner's best management practices
 20. Owner-accepted plans prepared by the Contractor
- B. Additional regulatory requirements are outlined in Section 01 41 00 – Regulatory Requirements.
- C. Where a compliance requirement conflicts with another, then the more stringent requirement shall take precedence. Noncompliant work shall be repaired or replaced to the Owner's satisfaction at no cost to the Owner.

1.9 AVAILABLE JOBSITE DRAWINGS AND OTHER OWNER-PROVIDED INFORMATION

- A. A collection of Jobsite Drawings is included in Appendix B to provide the Contractor details on the building, locations and details of utilities, and details on other features. Appendix B may not contain all pertinent details needed by the Contractor to perform the Work. It is the responsibility of the Contractor to request additional Drawings as necessary for the performance of the Work; however, due to the age of the school, additional Drawings may not be available. The Contractor shall have access to additional available Drawings, and access to the Jobsite, as requested by the Contractor. The Contractor shall have ultimate responsibility for locating all pertinent buildings, locations, details of utilities, and details of other features pertinent to the Work.

- B. Details on, and conditions of, structures and locations of underground utilities and structures shown on the Drawings and other provided documents are provided for informational purposes only and it is not to be inferred that the details, conditions, and locations shown / provided are precise or that all existing conditions are depicted or detailed. It is the Contractor's responsibility to verify details, locations, and conditions prior to performing the Work.

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION (Not used)

END OF SECTION

SECTION 01 14 00 – WORK RESTRICTIONS

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. The Contractor shall comply with all Jobsite protocols, including security, and safety requirements. Requirements apply to all employees of the Contractor, employees of Subcontractors to the Contractor, and employees of all vendors utilized by the Contractor.

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
1. Section 01 33 00 – Submittal Procedures
 2. Section 01 51 00 – Temporary Utilities

1.3 CONTRACTOR ACCESS AND USE OF PREMISES

A. Safety

1. All employees of the Contractor, employees of Subcontractors to the Contractor, and employees of all vendors utilized by the Contractor shall perform all Work safely as required by the Occupational Safety and Health Administration (OSHA) and Illinois OSHA.
2. The Contractor shall ensure all workers, including truck drivers, wear appropriate personal protective equipment (PPE) at all times on the Jobsite. At a minimum, workers shall wear Level D PPE including hard hat, safety glasses, high visibility reflective clothing, gloves, and steel-toe footwear. Additional PPE shall be provided to workers as appropriate for the work performed, in accordance with the accepted Contractor's health and safety plan and all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.

B. Security

1. It is the Contractor's responsibility to provide security measures (e.g., lighting, cameras) or services (e.g., person or personnel) during daytime and / or nighttime hours that may be deemed necessary by the Contractor for protection of its equipment, tools, materials, and Work-generated materials (e.g., scrap) stored onsite during the performance of the Work. The Owner shall not be liable for loss or damage of Contractor's tools, vehicles, equipment, or materials, whatever the cause. Such loss or damage shall not be sufficient reason for changes in the project schedule.
2. Security services procured by the Contractor, if any, shall be approved by and coordinated with the Owner.

3. The Contractor shall provide adequate outside security lighting at the Contractor's temporary facilities.
- C. Additional requirements for Work performed on Site property and within the Jobsite include the following:
1. The Contractor shall ensure that Contractor and Subcontractor personnel employed become familiar with and obey activity regulations including safety, fire, traffic, noise, dust, and security.
 2. The Contractor's use of the premises shall be limited to the Work being performed under the Contract Documents, including Technical Specifications and Drawings.
 3. The Contractor shall confine operations to areas within the Work limits indicated in the Drawings, or as otherwise approved in writing by the Owner. Portions of the Jobsite beyond areas in which construction operations are indicated are not to be entered or disturbed.
 4. The Contractor shall be responsible for any damage to roadways, facilities, trees, or structures on, or adjacent to, the Jobsite due to negligence, carelessness, actions, errors, or omissions on the part of the Contractor or the Contractor's Subcontractors.
 5. The Contractor shall enter and exit the Jobsite only at designated locations as approved in the Contractor's Work plans.
 6. No equipment may be utilized, or materials stored or staged, outside the Jobsite. Driveways and entrances serving the premises are to be clear and available to the Owner and other necessary non-construction personnel (e.g., regulatory agency personnel). The Contractor shall move stored materials and equipment that interfere with the operations of the Owner, other contractors to the Owner, or at the Owner's request.
 7. The Contractor shall make all necessary applications and arrangement for and provide necessary equipment for connections, controls, and protections associated with utility use as specified in Section 01 51 00 – Temporary Utilities.
 8. The Contractor shall perform Work in a manner that does not allow sediment, debris, oils, or other materials to enter storm water systems.
- D. Working Days and Hours
1. Normal Work hours shall be from no earlier than 8:00 A.M. to no later than 6:00 P.M., Monday through Friday or as otherwise approved in advance by the Owner, and subject to availability of adequate lighting to safely perform the Work.
 2. Any variation from normal Work hours shall be subject to approval by the Owner. Any request for change must be made to the Owner no less than 48 hours in advance.
 3. If Work before or after normal Work hours is approved by the Owner, the Contractor shall furnish adequate lighting for the Work. The Contractor shall provide adequate lighting at all times, as deemed necessary by the Owner for safety reasons. However, the Owner shall not require additional lighting if the Contractor can demonstrate that light levels in the Work area meet or exceed OSHA regulations.

4. The Contractor may, with Owner's approval, conduct equipment maintenance during hours outside of the normal Work hours.
5. Work hours established by any ordinance, law, or regulation shall supersede the requirements of this Section.

1.4 SUBMITTALS

A. Personnel Qualifications

1. The Contractor shall submit a letter certifying that all employees of the Contractor and Contractor's Subcontractors that perform Work at the Jobsite are properly qualified, trained, certified, or licensed, as applicable, to perform assigned Work. Training, certifications, and licenses include, but are not limited to, the following:
 - a. Medical surveillance and drug screening
 - b. Respirator fit testing
 - c. Hazard Communication (HAZCOM) training
 - d. US Department of Transportation (USDOT) hazardous materials training
 - e. Waste management awareness training
 - f. Machinery and equipment operator training and licenses
 - g. State of Illinois asbestos supervisor and worker certifications
 - h. Qualifications or certifications of personnel performing inspections, such as storm water pollution prevention, erosion and sediment controls, excavations, and backfill testing
2. Submittals shall be submitted as specified in Section 01 33 00 – Submittal Procedures.
3. Training, certifications, and / or licenses shall be provided to the Owner upon request.

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION (Not used)

END OF SECTION

SECTION 01 20 00 – PRICE BREAKDOWN

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. Payment for Work under this Contract shall be made on a lump sum basis for Work actually completed. Each lump sum price payment shall constitute full compensation for all permitting, procurement, and construction services, including all manpower, materials, facilities, utilities, equipment, tools, and incidentals required to complete the Work in accordance with the Contract Documents and all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.
- B. Payment items for the Work are listed in Section 00 41 13 – Lump Sum Pricing Schedule. All costs for items of Work, which are not specifically mentioned, shall be included in the listed lump sum item most closely associated with the Work involved.
- C. The Contractor shall accept compensation as full payment for furnishing all labor, equipment, tools, materials, and incidentals necessary to complete the Work and for performing all Work contemplated and embraced by the Contract; also, for all loss or damage arising from the nature of the Work, or from the action of the elements, or from any unforeseen difficulties which may be encountered during the execution of the Work until its final acceptance by the Owner.
- D. No extra payment shall be made for lack of progress, defective workmanship, or delays caused by weather, the Contractor's Subcontractor(s), or equipment and material supply vendors.
- E. The Contractor shall warrant that all Work completed is fully free from deficiencies in materials and / or workmanship for a period of one year from the date of project completion and final acceptance by the Owner. The Warranty shall include but not be limited to the proper abandonment of all below grade structures and utilities, stabilization of backfilled areas, repair or replacement of paved areas that were designated to remain, and repair of graded areas to promote positive drainage of storm water. Any Work during the Warranty Period that is a result of deficiencies shall be completed by the Contractor, in a prompt manner as directed by the Owner, at no additional cost to the Owner.
- F. The Contractor shall invoice the Owner on or before the 10th day of each calendar month or as may be otherwise provided under any purchase order, for any amount(s) due hereunder for the preceding calendar month. Invoices shall be submitted to the Owner for review and shall include appropriate submittals to substantiate payment request including an updated schedule.

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:

1. Section 00 41 13 – Lump Sum Pricing Schedule
2. Section 01 32 00 – Project Controls Requirements
3. Section 01 35 13 – Special Project Procedures

1.3 ELIMINATED ITEMS

- A. Should any Work be eliminated from a lump sum item, a Project Change Notice (PCN) shall be issued to adjust the amount of the lump sum item. A PCN shall not be required for the complete elimination of a lump sum item. However, payment shall not be made for lump sum Work items not completed.

1.4 INCIDENTAL WORK

- A. Incidental Work items for which separate payment is not measured includes, but is not limited to, the following items. Costs for incidental Work shall be included in a lump sum price item most closely associated with the Work involved.
1. Securing necessary permits and complying with all requirements.
 2. Coordinating with Owner, Owner's Engineer, other Owner contractors, regulatory agencies, and Contractor's Subcontractors throughout the performance of the Work.
 3. Attending meetings with Owner, Owner's Engineer, and regulatory agencies to discuss Work progress, planned task procedures, and others as may be requested.
 4. Providing personal protective equipment, tools, and controls, including monitoring, necessary for performing Work in accordance with applicable Federal, State, local laws, ordinances, codes, and rules and regulations applicable to the Work.
 5. Implementing health and safety requirements specified in the Contractor's health and safety plan.
 6. Performing testing and inspections necessary for quality control.
 7. Providing and maintaining signs, barricades, fencing, and lighting.
 8. Setting up, paying for, and maintaining temporary facilities, construction aids, barriers and enclosures, and environmental controls including erosion, sediment, dust and odor.
 9. Security for Contractor's equipment, materials, and generated scrap / recyclable materials.
 10. Setting up, paying for, and distributing utilities necessary for completion of the Work including power, water, sanitary sewer, and data.
 11. Setting up and maintaining haul roads and parking areas.
 12. Performing Work in accordance with soil erosion and sediment control requirements. This includes dust, dirt and mud control of haul roads, parking areas and entrance and exit routes on the Jobsite and public roadways. The Contractor shall employ water trucks and street cleaners / sweepers as specified in the Technical Specifications.
 13. Providing access to the Jobsite or any Jobsite materials for the Owner or any person or entity designated by the Owner.
 14. Managing storm water run on and run off

15. Providing pedestrian and traffic control.
 16. Clearing, grubbing, and stripping within the limits of disturbance required to perform the Work.
 17. Designing and constructing stabilized excavation methods necessary for performance of the Work.
 18. Dewatering as necessary for the performance of the Work, including labor, equipment, and materials for collecting, storing, analyzing, treating / filtering, and discharging or transporting offsite for disposal.
 19. Collecting and analyzing samples necessary for proper waste characterization.
 20. Decontaminating all equipment, tools, and materials and collection and removal / disposal of materials generated during decontamination.
 21. Restoration of areas that were designated on the Drawings to remain undisturbed.
 22. Transportation and disposal of general trash and rubbish.
 23. Site cleanup.
- B. Schedule impacts due to weather conditions shall be considered for time extensions with appropriate documentation. However, no additional compensation shall be allowed for impacts due to weather conditions.

1.5 LUMP SUM PAYMENT ITEMS

- A. Itemized descriptions of the Work, for the purpose of evaluating Section 00 41 13 – Lump Sum Pricing Schedule, includes, the following:

1. Item A – Initiation

a. Item A.1 – General Requirements

Work for this item includes, but is not limited to, preparation of, revisions as required by the Owner's review of the specified pre-construction submittals (see Section 01 35 13 – Special Project Procedures) and any other Contractor general requirements.

b. Item A.2 – Payment and Performance Bond

The Contractor shall furnish to the Owner upon execution of the Contract, a payment and performance bond in an amount equal to the total Contract Price, in form and substance acceptable to the Owner and issued by a surety company acceptable to the Owner. Said bond shall be written so as to remain in effect through the Warranty Period and shall include all of the Contractor's Warranty obligations.

2. Item B – Mobilization and Jobsite Preparation

a. Item B.1 – Mobilization and Jobsite Preparation

Work for this item includes the mobilization of all personnel, equipment, tools, and materials to the Jobsite for the completion of Jobsite preparation Work, including performing utility locating services and installing temporary facilities and utilities. Temporary facilities shall include furnishing, installing, and maintaining temporary facilities and controls as described in the Technical Specifications and other Contract Documents and required for the execution of the Work. Temporary facilities and controls are expected to include, but not be limited to office / trailer space;

signage; Jobsite security and protection measures; temporary barricades; equipment, material, and waste storage areas (e.g., equipment laydown areas, container storage areas, waste storage areas); and environmental, soil erosion, storm water, water way protection, and dust control measures. Other control measures include maintaining and installing new, as necessary, and fence / barrier around the Jobsite. Temporary utilities include installing and maintaining temporary utilities as described in the Technical Specifications and other Contract Documents and required for the execution of the Work. Temporary utilities include power, water, sanitary, and data as required for the performance of the Work.

3. Item C – Asbestos Abatement and Regulated Material Removal

a. **Item C.1 – Miscellaneous and Unknown Chemical Removal, Transport, and Disposal**

Work for this item includes all labor, equipment, tools, and materials necessary to remove / collect, manage (classify, segregate, containerize, label, temporarily store, monitor, and inspect), load, manifest, transport, and dispose of miscellaneous abandoned chemicals present at the Jobsite. All chemicals shall be removed from the building prior to demolition, unless it is located in an area of the building determined to be unsafe to occupy by the Contractor's third-party engineering firm. Regulated waste shall be disposed offsite at an Owner-approved facility in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations. This item also includes completion of specified submittals and all other related Work.

b. **Item C.2 – Nonhazardous Waste Collection, Transport, and Disposal**

Work for this item includes all labor, equipment, tools, and materials necessary to remove / collect, manage (classify, segregate, containerize, label, temporarily store, monitor, and inspect), load, manifest, transport, and dispose nonhazardous regulated waste present at the Jobsite. This item includes providing all personal protection equipment (PPE); construction and maintenance of regulated removal areas (i.e., barricades, enclosures, construction materials, equipment, supplies, monitoring, etc.); and removal, collection, transportation, and disposal of flaking non-hazardous and non-PCB paint on all painted surfaces prior to commencing demolition (where safe to complete). This item includes removal of other nonhazardous regulated solid waste that can be removed prior to demolition and waste that must be removed during demolition, if any. This item does not include nonhazardous construction and debris (C&D) waste generated during structure demolition that is quantified in Item D.2. Nonhazardous regulated waste shall be disposed offsite at an Owner-approved facility in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations. This item also includes completion of specified submittals and all other related Work.

c. **Item C.3 – Universal Waste Collection, Transport, and Recycling**

Work for this item includes all labor, equipment, tools, and materials necessary to remove / collect, manage (classify, segregate, containerize, label, temporarily store, monitor, and inspect), load, manifest, transport, and recycle universal waste present at the Jobsite. This item includes universal waste that can be removed prior to demolition and universal waste that must be removed during demolition. Universal waste shall be recycled offsite at an Owner-approved facility in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations. This item includes completion of specified submittals and all other related Work.

d. **Item C.4 – Hazardous Waste Collection, Transport, and Disposal**

Work for this item includes all labor, equipment, tools, and materials necessary to remove / collect, manage (classify, segregate, containerize, label, temporarily store, monitor, and inspect), load, manifest, transport, and dispose hazardous waste present at the Jobsite. This item includes providing all PPE; construction and maintenance of regulated removal areas (i.e., barricades, enclosures, construction materials, equipment, supplies, monitoring, etc.); and removal, collection, transportation, and disposal of flaking hazardous and non-PCB paint on all painted surfaces prior to commencing demolition (where safe to complete). This item includes removal of other hazardous waste that can be removed prior to demolition and waste that must be removed during demolition. Hazardous solid waste shall be disposed offsite at an Owner-approved facility in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations. This item also includes completion of specified submittals and all other related Work.

e. **Item C.5 – PCB Removal, Transport, and Disposal**

Work for this item includes all labor, equipment, tools, and materials necessary to remove, collect, manage (classify, segregate, containerize, label, temporarily store, monitor, and inspect), load, manifest, transport, and dispose other PCB-containing materials (e.g., oil, caulk, paint, bulk product, etc.) present at the Jobsite. This item includes removing PCB-containing paint / coating that is in a flaking condition. PCB waste shall be disposed offsite at an Owner-approved facility in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations. This item also includes completion of specified submittals and all other related Work.

f. **Item C.6 – ACM Abatement, Transport, and Disposal**

Work for this item includes all mobilization, temporary facilities, labor, training, equipment, materials, lifts, scaffolding, tools, testing, and permits, licenses, and overhead necessary to abate, manage (classify, segregate, containerize, label, temporarily store, monitor, and inspect), load, manifest, transport, and dispose all ACM (known and additionally encountered) at the Jobsite. Work for this item includes abatement of ACM listed in the *Pre-Demolition Site Characterization* survey as well as any ACM or suspected ACM found during demolition. Cost for sampling any additionally encountered suspect ACM (i.e., assumed ACM), as identified

by the Contractor or Owner, shall be included in this pay item. ACM waste shall be disposed offsite at an Owner-approved licensed facility in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations. Friable and non-friable ACM shall be handled and disposed separately as required. This item includes providing all PPE; construction and maintenance of all regulated areas (i.e., barricades, enclosures, construction materials, equipment, supplies, monitoring, etc.); managing, treating, and discharging or offsite disposal, as required, of water that is generated during the Work; completion of any specified submittals (i.e., suspect ACM sampling and laboratory analysis reports, daily / weekly progress updates / inspections, etc.); and all other related Work.

4. Item D – Demolition

a. Item D.1 – Building Demolition

Work for this item includes all personnel, equipment, tools, and materials necessary to demolish the structure via manual dismantlement demolition techniques only, with no felling (via explosive or non-explosive techniques) of the structure. This item includes complete removal of the basement and all foundations, designated above grade utility poles and wiring, all underground utilities, and all pavement within the Jobsite. Work shall be performed in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations. This item also includes segregating, decontaminating, sizing, and storing of waste and recyclable materials; managing (classify, decontaminate, size, temporarily store, and monitor) demolition debris; managing, treating, and discharging or offsite disposal, as required, of water that accumulates in the basement or otherwise encountered or generated during the Work. Transportation and offsite disposal / recycling costs are to be included in Items D.2 and D.3. The credit value for all recyclable materials is to be included in Item D.4. Costs for importing fill and backfilling the basement are to be included in Item E.1.

b. Item D.2 – Construction and Debris Waste Transport and Disposal

Work for this item includes all labor, equipment, tools, and materials necessary to load, transport via trucking, and dispose demolition waste. Demolition waste shall be disposed offsite at an Owner-approved facility in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations. This item includes completion of specified submittals and all other related Work.

c. Item D.3 – Recyclable Materials Transport

Work for this item includes all labor, equipment, tools, and materials necessary to load, transport via trucking, all other recyclable materials. Recyclable materials shall be transported offsite in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations. This item includes completion of specified submittals and all other related Work.

d. Item D.4 – Recycling of Recyclable Materials (CREDIT)

This item includes the full credit value (expressed as a negative value) for recycling all recyclable materials from the Jobsite, such as, but not limited to, copper, aluminum, steel, alloys, concrete, and any other specialty metals.

5. Item E – Jobsite Restoration and Demobilization

a. Item E.1 – Backfill

Work for this item includes all personnel, equipment, tools, and materials necessary to furnish, place, and compact imported fill in the basement, and other imported fill deemed necessary by the Contractor for backfilling to existing grade. This item includes furnishing and placing additional imported fill above existing grade as necessary to provide positive drainage of storm water across the Jobsite. This item also includes compaction testing during backfilling, completion of specified submittals, and all other related Work.

b. Item E.2 – Topsoil

Work for this item includes all personnel, equipment, tools, and materials necessary to furnish, place, and grade imported topsoil, completion of specified submittal, and all other related Work.

c. Item E.3 – Seeding

Work for this item includes all personnel, equipment, tools, and materials necessary to seed all disturbed areas; maintain seeded areas as specified, removal of soil erosion and sedimentation controls following establishment of grass, completion of specified submittals; and all other related Work.

d. Item E.4 – Demobilization

Work for this item includes the removal of all temporary facilities, construction aids, temporary barriers and enclosures, and all personnel, equipment, tools, and materials from the Jobsite.

6. Item F – Closeout Submittals

a. Item F.1 – Final Submittals

Work for this item includes close-out of permits and preparation of revisions as required by the Owner's reviews, and final acceptance of the specified post-Work submittals, including final inspection, punchlists, remaining ACM report (if needed), PCB summary report (if needed), construction summary report, certificate of final acceptance, and lien waiver documents.

- B. Licenses, fees, shipping / freight expenses shall be accounted for in the Bidder's proposed price.

1.6 CHANGE ORDERS

- A. The maximum payment obligation shall be increased or decreased, as applicable, to reflect change in Work authorized or directed by Owner under a Project Change Notice.

- B. The Owner shall not be obligated to pay Contractor for any change, unless Owner has approved or issued the applicable Project Change Notice in advance of completion of the Work.

1.7 PROJECT INVOICING

- A. The Contractor shall submit monthly invoices as specified in Section 01 32 00 – Project Controls Requirements.

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION (Not used)

END OF SECTION

SECTION 01 26 00 – CONTRACT MODIFICATION PROCEDURES

PART 1 – GENERAL

1.1 REQUIREMENTS

- A. For any modifications to the Contract, the Contractor shall provide the Owner with sufficient information and sufficient detail to the Owner's satisfaction for evaluation purposes.
- B. The Contractor shall follow the Owner's Contract modification processes, which includes:
 - 1. Preparation and submittal of a Request for Information (RFI).
 - 2. Preparation and submittal of a Project Change Notice (PCN).
- C. The Contractor shall provide the Owner with sufficient time for reviews, approvals, and processing of such change requests.
- D. In the event of extra Work or a change in scope of Work, written authorization from the Owner's project manager must be issued in the form of a PCN as authorization prior to the start of such Work. This written authorization shall be confirmed by a written Contract Change Order. No claim for extra Work or additions shall be valid in the absence of an order signed by the Owner.

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
 - 1. Section 01 26 13 – Request for Information
 - 2. Section 01 26 39 – Project Change Notice

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION (Not used)

END OF SECTION

SECTION 01 26 13 – REQUEST FOR INFORMATION

PART 1 – GENERAL

1.1. REQUIREMENTS

- A. The Contractor may submit Requests for Information (RFIs) to clarify or to request deviations from the Work requirements.
- B. The Contractor shall provide sufficient detail, including a written description, marked drawings and / or photos as appropriate, in RFIs such that the Owner can appropriately evaluate the request.
- C. The Contractor shall provide the Owner sufficient time to review and respond to RFIs.
- D. The Contractor shall follow the Owner's RFI process and use the Owner's RFI form for any and all information requests.
- E. The Owner will supply the Contractor with the required RFI form in electronic format upon award of the Work.
- F. If the RFI results in a change in Work, a Project Change Notice shall be prepared and submitted by the Contractor. The Contractor shall provide all associated documentation to justify the change in Work.

1.2. ATTACHMENTS

- A. Attachment 001 – RFI Form

1.3. REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
 - 1. Section 01 26 39 – Project Change Notice

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION (Not used)

END OF SECTION

REQUEST FOR INFORMATION

RFI #: _____ **Date:** _____
Project: _____ **Contract #:** _____
To: _____
From: _____
Subject: _____

Request:

Attachments:

Response required by:

Response By: _____ **Date:** _____

Response:

SECTION 01 26 39 – PROJECT CHANGE NOTICE

PART 1 – GENERAL

1.1. REQUIREMENTS

- A. If a change in scope occurs during the performance of the Work, the Contractor shall submit a Project Change Notice (PCN) to the Owner. The Contractor shall provide the following as part of the PCN:
1. Written description providing the rationale for why, in the Contractor's opinion, there is a change in the Work
 2. Photographs to aid in the rationale for the change
 3. Completed Request for Information (RFI), if the change was the result of an RFI
 4. Detailed cost estimate, as described in this Section
 5. Revised project schedule incorporating the change in Work
- B. The Contractor shall provide an accurate detailed cost estimate which includes the following:
1. Estimate showing clear definition of scope of Work broken into the following:
 - a. Work breakdown
 - b. Quantity
 - c. Units
 - d. Unit cost for material
 - e. Unit cost for labor
 - f. Unit cost for equipment
- C. The Contractor shall submit a revised project schedule showing the new activity, durations, and logic. The effect on critical path or total float management shall be clearly identified.
- D. Once approved by the Owner, the PCN shall be forwarded to the Contractor for approval of the cost, schedule or scope change denoted in the PCN. The approved PCN shall authorize the Contractor to proceed with the change. Subsequent to the approval of a PCN, a change order shall be issued to formalize the change and to authorize the Contractor to invoice for the Work, if a price adjustment results from the change.
- E. The Contractor shall provide the Owner sufficient time to review and respond to PCNs.
- F. Work associated with the PCN shall not proceed until the PCN is approved by the Owner.

1.2. REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:

1. Section 01 26 13 – Request for Information
2. Section 01 33 00 – Submittal Procedures

1.3. SUBMITTALS

- A. PCNs, as outlined in this Section.
- B. Submittals shall be provided as required in Section 01 33 00 – Submittal Procedures.

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION (Not used)

END OF SECTION

SECTION 01 31 00 – PROJECT MANAGEMENT AND COORDINATION

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. The Contractor shall provide a project team competent to plan and execute all aspects of the Work completely and safely.
- B. The Contractor shall be responsible for managing and coordinating all Work so that once the project is started, it shall be carried to completion without delay.
- C. The Contractor shall coordinate all Work with the Owner. The Contractor shall notify the Owner prior to commencing new Work tasks.
- D. The Contractor shall attend project meetings as specified and as required by the Owner.

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
 - 1. Section 01 33 00 – Submittal Procedures
 - 2. Section 01 78 00 – Closeout Requirements
 - 3. Section 02 00 00 – Existing Conditions

1.3 STAFFING EXPECTATIONS

- A. The Contractor shall provide a project team competent to plan and execute all aspects of the Work completely and safely.
- B. The Contractor shall designate a full-time onsite construction manager acceptable to the Owner who will have full responsibility for the execution of the Work and will act as a single point of contact in all matters on behalf of the Contractor. The Contractor shall also provide staff to supervise, manage and coordinate the Work of the Contractor and Subcontractors at the Jobsite. The Contractor's key personnel shall at all times hold the positions and be dedicated to the performance of the duties described in this Section. Any replacement of the construction manager or other key personnel shall be subject to the prior written consent of the Owner.
- C. Generally, the Contractor shall have on each shift, an individual responsible for safety and an individual responsible for construction activities. The Contractor shall have a bi-lingual supervisor onsite at all times if any employees or employees of the Contractor's Subcontractors at the Jobsite are not fluent in English.
- D. The Contractor shall have a minimum of one qualified and designated safety representative onsite at all times, including when only a Subcontractor to the Contractor is at the Jobsite.

- E. The Contractor is required to provide a competent person with sufficient previous experience on a similar project for all positions. A competent person(s) shall be available at the Jobsite at all times and capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to workers, and who has authorization to take prompt corrective measures to eliminate the condition(s). A competent person shall be at the Jobsite for the following types of expected Work:
1. Fall protection and elevated Work
 2. Hot Work
 3. Electrical
 4. Scaffolding
 5. Ladders
 6. Confined space
 7. Cranes and rigging
 8. Excavation
 9. Asbestos
 10. Polychlorinated biphenyls (PCBs)
 11. Demolition
 12. Waste management
 13. Water management and discharge
- F. The Owner has the right to request and / or require changes to Contractor staffing if the Contractor staff is not adequate for the needs of the Work.
- G. The Owner will have the right of refusal of any person assigned to the Contractor's team if the person's qualifications and / or experience do not meet the requirements of the Work.

1.4 PROJECT COORDINATION

- A. The Contractor shall notify the Owner prior to commencing new Work tasks. For Work where regulatory agencies must be notified, such as asbestos abatement (i.e., Illinois Environmental Protection Agency National Emissions Standards for Hazardous Air Pollutants), the Contractor shall notify the Owner of planned Work a minimum 21 days prior to commencing Work. Work shall not begin until authorized by the Owner and required notifications to appropriate regulatory agencies, including local agencies, have been made and acknowledged.
- B. It is the responsibility of the Contractor to coordinate the presence of regulatory agency and / or local municipal representatives for Work where a representative must be present to perform an inspection, such as connection to City utilities, installation of soil erosion and sediment controls, abandonment of utilities, and pre and post demolition Work. The Contractor shall notify the Owner when regulatory agency and local municipal representatives are scheduled to be present at the Jobsite.
- C. The Contractor shall notify the Owner immediately when regulatory agency, local municipal, or other representatives arrive at the Jobsite.

- D. There are underground utilities which may exist within the limits of Work that are to remain in service. The Contractor shall identify utilities and notify the Owner when ground intrusive Work, such as installation of utilities for trailers and other below grade Work, is scheduled in areas that may affect existing utilities. Any utility service interruptions or outages required by the Contractor in performing the Work shall be pre-arranged with the Owner and third-party utility owner, when appropriate, and shall occur only during agreed scheduled times.
- E. The Contractor shall make arrangements with vendors, suppliers, and Subcontractors for timely delivery of materials, equipment, containers, haul trucks, and other necessary project needs so as not to delay Work in progress.

1.5 PROJECT MEETINGS

A. Project Kick-off Meeting

- 1. Within 30 days following Notice of award, the Contractor shall attend a meeting with the Owner to review the following:
 - a. Designation of responsible personnel
 - b. Discussion of the Owner's and Contractor's responsibilities
 - c. Contractor's responsibilities for safety
 - d. Work schedule and critical sequencing of activities
 - e. Contractor's understanding of required permitting activities
 - f. Site security and use of premises requirements
 - g. Temporary utilities
 - h. Procedures for transmittal, review, and distribution of Contractor submittals, including Work plans, reports, requests for information, Project Change Notice (PCN), and applications for payment.
 - i. Other specific items the Owner or Contractor need to discuss relative to the project
- 2. Attendance by the Contractor's project manager, construction manager, and health and safety manager shall be required.
- 3. The Owner will prepare and distribute meeting minutes.
- 4. The project kick-off meeting will be held at a location designated by the Owner and may be held at the Jobsite or Owner's offices.

B. Pre-Construction Meeting(s)

- 1. The Owner will schedule a pre-construction meeting(s) with the Contractor to review the following:
 - a. Planned sequencing of upcoming Work
 - b. Site security and use of premises requirements
 - c. Health and safety and quality control requirements and procedures
 - d. Necessary regulatory agency notifications
 - e. Coordination with other Owner contractors, if any
 - f. Submittals

2. The Owner may schedule separate pre-construction meetings for major features of Work, such as Jobsite preparation, regulated materials removal, abatement and demolition phase.
3. Attendance by the Contractor's project manager, construction manager, health and safety manager, and Contractor's Subcontractor's job superintendents shall be required.
4. The pre-construction meetings will be held at the Jobsite or the Owner's office.

C. Pre-Final Inspection Meeting

1. Requirements for pre-final inspection meetings are specified in Section 01 78 00 – Closeout Requirements.

D. Final Inspection Meeting

1. Requirements for final inspection meetings are specified in Section 01 78 00 – Closeout Requirements.

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION (Not used)

END OF SECTION

SECTION 01 32 00 – PROJECT CONTROLS REQUIREMENTS

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. The Contractor shall submit schedules, invoices, and reports to the Owner that provide the Owner with an accurate assessment of the Contractor's progress in completing the Work. Report frequency includes daily, weekly, and monthly. These reports assist the Owner in determining cash flow, forecasting, and invoicing.

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
1. Section 00 41 13 – Lump Sum Pricing Schedule
 2. Section 01 26 39 – Project Change Notice
 3. Section 01 32 16 – Contract Milestone Schedule
 4. Section 01 32 33 – Media Documentation
 5. Section 01 33 00 – Submittal Procedures
 6. Section 01 35 13 – Special Project Procedures

1.3 SUBMITTALS

- A. Within 30 days following notice of award, the Contractor shall submit for Owner review and approval:
1. Baseline project schedule
 2. Schedule of values (SOV)
- B. During the performance of the Work, the Contractor shall submit additional project control submittals as follows:

<u>Submittal</u>	<u>Frequency</u>
1. Weekly progress report	Weekly
2. Invoices	Monthly
3. Updated project schedule	Monthly
4. Project recovery plan or others as necessary and requested	As Required

1.4 PROJECT SCHEDULE

- A. Schedule Development
1. The baseline project schedule shall be a level 3, critical path method technique schedule.

2. The Contractor's schedule shall conform to the SOV specified herein, the Contractor's bid schedule specified in Section 00 41 13 – Lump Sum Pricing Schedule, and milestones specified in Section 01 32 16 – Contract Milestone Schedule.
3. The Contractor shall be solely responsible for:
 - a. The logic, activity durations and resource requirements of the project which will support the Contractor milestones
 - b. Integrating, scheduling and statusing Contractor's activities, including activities performed by the Contractor's Subcontractors
 - c. Scheduling any outside restraints to the Contractor's Work effort
4. The Contractor's detailed baseline project schedule shall be the basis for planning, scheduling, and executing the Work and shall be of sufficient detail to define workflow and activity dependencies to accurately determine activity progress as further defined with the following guidelines:
 - a. The duration in terms of Work days
 - b. Logical Work breakdown structure with sufficient detail to identify the sequence of activities throughout the progress of the Work
 - c. Depicting critical path, including total and free float
 - d. Inclusion of schedule logic which clearly identifies the predecessor and successor of each activity, constraints, and lags
 - e. Inclusion of key Contractor milestones including:
 - i. Subcontract bid submittal
 - ii. Subcontract award / Notice to proceed
 - iii. Pre-construction submittals start and finish
 - iv. Jobsite mobilization start and finish
 - v. Temporary facility and utility installation start and finish
 - vi. Initial Jobsite Work start and finish
 - vii. Abatement Work start and finish
 - viii. Demolition Work start and finish
 - ix. Jobsite restoration activity Work start and finish
 - x. Jobsite demobilization start and finish
 - xi. Post-construction submittals start and finish
 - f. Inclusion of subtasks for definable work under each key Contractor milestone, such as individual submittals, demolition by feature, backfill, restoration, etc.
 - g. Inclusion of pre-Work activities including:
 - i. Contractor Work plan preparation, submittal, time for Owner review, and Work plan finalization
 - ii. Permit preparation, submittal to the Owner, time for Owner review, permit finalization, submittal to regulatory authority, and regulatory acceptance
 - h. Inclusion of subtasks for definable Work under each key Contractor milestone, such as individual submittals, demolition by feature, backfill, restoration, etc.
 - i. Inclusion of delivery dates for Contractor-installed products, such as for abandonment, backfilling / Jobsite restoration materials, etc.

- j. Inclusion of activities and / or Contractor milestones for testing and hold points for Contractor inspections, quality verification, and Work area clearance
 - k. Inclusion of activities and /or Contractor milestones for Owner and / or required regulatory agency inspections and clearances
 - l. Inclusion of specific project activities as requested by the Owner
 - m. Inclusion of correlation between all schedule activities and the Contractor's bid schedule items:
 - i. For each scheduled activity, the Contractor shall indicate which bid item, as shown in Section 00 41 13 – Lump Sum Pricing Schedule, the scheduled activity corresponds to
5. The baseline project schedule detail and interdependencies shall be coordinated with the Owner. The baseline project schedule shall be developed and structured in a 'Top Down' process to assure the listed Work tasks roll-up into upper-level summary activities coinciding with the SOV.
6. Allowances shall be made in the baseline project schedule for occurrences such as holidays, inclement weather, or other risks that would impact completion of the Work.
- B. Schedule Software
1. The Contractor shall prepare the baseline project schedule in Microsoft Project scheduling software.
- C. Schedule Control
1. The Contractor shall prepare and submit to the Owner a baseline project schedule prior to commencing physical Work. Upon finalization, this approved baseline project schedule will serve as the baseline for comparison to all subsequently submitted project schedule updates.
2. The Contractor project schedule updates shall be required weekly (or at intervals as directed by the Owner). The Owner will not serve as a second level reviewer for project schedule updates. Updates and revisions must be checked by the Contractor and be error free prior to submittal.
3. All assumptions made in the development of the baseline project schedule and subsequent updates shall be listed on accompanying documentation, such as the monthly progress reports.
4. The baseline project schedule and subsequent updates shall be submitted to the Owner as specified in Section 01 33 00 – Submittal Procedures. Schedules shall be provided in electronic native-file format as well as Adobe Portable Document Format (PDF).
5. As Work progresses, the Contractor shall estimate the percent complete for each activity and update the project schedule prior to the designated submission (weekly or monthly). Estimates for percent complete will be verified by the Owner prior to acceptance.
6. If the Contractor's schedule critical path float becomes negative or one or more activities slip (impacting established Contractor milestones), the Contractor shall submit to the Owner a project recovery plan as specified in this Section.

7. Changes in the Work that affect existing activities, schedule dates, duration of activities or require new activities and interdependence shall be added to the project schedule by the Contractor and may constitute a revision to the approved baseline project schedule. Any revision to the Owner-approved baseline project schedule must have written Owner approval. A signed Project Change Notice (PCN) shall be required prior to executing any changes to the Work. Procedures associated with implementing a PCN are specified in Section 01 26 39 – Project Change Notice.

1.5 SCHEDULE OF VALUES

- A. The Contractor shall provide the Owner a SOV that forecasts monthly cash flow values for each year of Work.
- B. The SOV shall be prepared based on the Contractor's approved baseline project schedule and Bid schedule.
- C. Cost Monitor and Control
 1. Unless otherwise stated, earning rules for Progress Payment of related items shall be as follows:
 - a. Lump Sum (Fixed Price) Work: Percent complete based on the physical Work / quantities complete.
 2. Any additional, optional, or extra work shall be approved via the PCN process specified in Section 01 26 39 – Project Change Notice.
 3. If the Owner awards additional scope on a time and material basis, the Contractor shall provide daily time and material sheets associated with the additional Work.
 4. The Contractor shall immediately provide notification to the Owner upon any potential change to the initially submitted annual cash flow forecast. Any such changes shall be approved by the Owner.

1.6 INVOICING

- A. The Contractor shall submit an invoice to the Owner no later than the 10th day of each month commencing after project award and prior to the Work completion date. Invoices shall be for Work completed in the immediately preceding month.
- B. The Contractor shall not request in any invoice the payment of any sum attributable to Work which has been rejected by the Owner or Contractor or which otherwise constitutes or relates to a Subcontractor's application for payment, billings or invoices which the Contractor disputes or for any other reason does not intend to pay in accordance with the terms of Contractor's agreement with its Subcontractors.
- C. The Contractor's invoices shall include the following. Inaccurate, incomplete, or invoices that do not provide adequate supporting documentation will not constitute a valid request for payment.

1. Completed American Institute of Architects (AIA) G702-1992, Application and Certificate for Payment, and AIA G703-1992, Continuation Sheet
 2. Contractor's partial release and waiver of liens and claims
 3. Monthly Progress Report, as specified in this Section
 4. Updated project schedule, as specified in this Section
 5. Updated SOV, as specified in this Section
- D. Percent complete stated in invoices for bid schedule items shall be fully evaluated by the Owner after the invoice is submitted. Percent complete communicated by the Contractor during the invoice period (prior to invoice submittal), such as in verbal communication with the Owner or in daily progress reports, are considered by the Owner as interim percent complete(s). Discrepancies, if any, between the Contractor's stated percent complete and the Owner's perceived percent complete shall be negotiated between the Owner and Contractor. An onsite evaluation of the discrepancy with the Owner and Contractor present may be required prior to invoice approval.

1.7 PROJECT CONTROL PROGRESS REPORTS

- A. Weekly Progress Report. The Contractor shall submit a weekly progress report to the Owner by the end of the following Monday. The weekly progress report shall summarize the Work performed, Jobsite inspections, and other pertinent information on Work performed at the Jobsite. Information contained in the weekly progress report shall include, but not be limited to the following:
1. Date of issue
 2. Reporting period
 3. Project title
 4. Contractor name
 5. A Work summary table that provides the following information:
 - a. Weather for the day (temperature, condition [sunny, cloudy, etc.], and precipitation)
 - b. Summary of Work performed (e.g., abatement floor 3, demolition auditorium)
 - c. Number of all personnel onsite by company name
 - d. Daily and cumulative total of hours worked by Contractor and Subcontractors
 - e. Air monitoring / sampling performed
 - f. Materials received
 - g. Daily and cumulative total of water volume discharged at the Jobsite, if any
 6. Estimation of percent complete for the following major Work:
 - a. Abatement
 - b. Demolition
 - c. Restoration
 7. Names of non-contractor individuals (such as public or agency inspectors) visiting the Jobsite and a summary of discussions held
 8. Locations of inspections, samples, tests, and results and name(s) of individual(s) making inspections or tests
 9. Name, date, time, and signature of document preparer

10. Attachments
 - a. Photographic log prepared in accordance with Section 01 32 33 – Media Documentation
 - b. Weekly cumulative total of solid and liquid wastes transported for disposal, by category (e.g., construction and debris, asbestos, polychlorinated biphenyls (PCBs), recyclable material, etc.)
 - c. Updated weekly schedule
 - d. Safety incident summary / investigation documentation, and other information shall be attached as necessary

1.8 PROJECT RECOVERY PLAN

- A. If critical path float in the Contractor's project schedule becomes negative or one or more activities slip and begin to impact established project milestones, the Contractor shall submit to the Owner a project recovery plan. The project recovery plan shall include, but not be limited to the following information:
 1. Provide a summary of issues causing delays, anticipated length of delays, and proposed corrective measures to return Work progress within project milestone dates. Corrective measures can include, but are not limited to:
 - a. Additional labor. Quantity and categories of labor shall be stated in the project recovery plan.
 - b. Additional equipment. Quantity and type of equipment shall be stated in the project recovery plan.
 - c. Additional Subcontractor(s). Number and category of personnel, quantity and type of equipment, Work to be completed by the Subcontractor, etc. shall be stated in the project recovery plan.
 2. Provide a summary of proposed schedule changes, including start and finish dates provided in the project schedule and proposed revised start and finish dates.
- B. The Contractor shall revise existing or submit new Work plans and / or permits as necessary when Work activities or new Subcontractors necessary to recover schedule slippage are different, alternative, or contradictory to the Contractor's existing approved Work plans and permits. Work shall not commence until revised / new Work plans are accepted by the Owner.

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION (Not used)

END OF SECTION

SECTION 01 32 16 – CONTRACT MILESTONE SCHEDULE

PART 1 – GENERAL

1.1. REQUIREMENTS

A. The Contractor agrees to execute the Work in accordance with the following schedule:

Task No.	Description	Milestone Completion Date
1	Notice to Proceed	11/23/2022
2	Pre-Work Submittals and Permitting Complete	12/16/2022
3	Mobilization and Jobsite Preparation	12/19/2022
4	Building Abatement and Demolition Complete	5/31/2023
5	Restoration Complete	6/27/2023
6	Demobilization Complete	6/30/2023
7	Post-Work Submittals Received and Accepted by the Owner	8/01/2023

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION (Not used)

END OF SECTION

SECTION 01 32 33 – MEDIA DOCUMENTATION

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. This Section specifies administrative and procedural requirements for use of media in documenting the performance of the Work.

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
1. Section 01 26 13 – Request for Information
 2. Section 01 32 00 – Project Controls Requirements
 3. Section 01 33 00 – Submittal Procedures
 4. Section 01 35 13 – Special Project Procedures
 5. Section 01 71 00 – Jobsite Preparation

1.3 SUBMITTALS

- A. Submittals associated with unmanned aerial vehicle (UAV) use, if proposed by the Contractor, includes the following:
1. Flight plan, as specified in this Section
 2. Drone pilot license
 3. Aviation specific liability insurance
- B. Submittals shall be provided as required in Section 01 33 00 – Submittal Procedures.

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION

3.1 DOCUMENTATION

- A. The Contractor shall be responsible for documenting the Work as follows:
1. Conditions of the Jobsite prior to commencement of Work, as specified in Section 01 71 00 – Jobsite Preparation.
 2. Conditions associated with submitted Requests for Information (RFI) and / or Project Change Notices (PCN). RFI requirements are specified in Section 01 26 13 – Request for Information. Project Change Notice requirements are specified in Section 01 26 39 – Project Change Notice.

3. Sample locations, such as for confirmation of presence / absence of asbestos or other regulated materials in building materials. Photographs taken to show sample locations shall be provided with analytical data reports as specified in Section 01 35 13 – Special Project Procedures.
 4. Work progress. Photographs taken to show Work progress shall be submitted with weekly project report, as specified in Section 01 32 00 – Project Controls Requirements.
 5. Conditions of the Jobsite upon completion of the Work. Photographs taken at the completion of the Work shall be provided in a construction summary report, as specified in Section 01 35 13 – Special Project Procedures.
- B. The Contractor is only authorized to document conditions relevant to the Work being performed. The Contractor is not permitted to obtain images / video of areas outside of the Contractor's Work area.
- C. Whenever possible views of Owner personnel and pedestrians shall be excluded from media.

3.2 DIGITAL IMAGES

- A. Photographs shall be labeled / tagged indicating date, time, location, direction facing (e.g., looking north), and other relevant information to aid the viewer in determining the exact location of the subject matter.
- B. If a close-up image is taken, such as at a location where an environmental sample is collected, a second image shall be taken providing a frame of reference for the viewer to determine where the sample was collected at the Jobsite.
- C. Images shall be submitted to the Owner as follows:
1. In JPEG format, with a minimum sensor size of 6.0 megapixels
 2. Image resolution not less than 1600 by 1200 pixels
 3. Same aspect ratio as the sensor, uncropped
- D. Images shall be loaded to the Owner's designated SharePoint website, if setup, or via other digital media storage device (i.e., CD-R / DVD-R).

3.3 VIDEOGRAPHY

- A. Video shall be collected as follows:
1. To document conditions of the Jobsite prior to commencing the Work
- B. Video shall be submitted to the Owner in MP4 or WMV format.

3.4 UNMANNED AERIAL VEHICLE USE

- A. If allowed by the Owner, UAVs or drones may be used for documentation purposes. Restrictions for UAV use include, but are not limited to, the following:
1. Prior to the flight, a flight plan will be submitted to the Owner for review and approval. The flight plan must include the following elements:
 - a. Site location
 - b. Pilot name and contact information
 - c. Mission information
 - d. Sectional airspace determination – distance from airport, airport traffic control (ATC) contact information
 - e. US Federal Aviation Administration (USFAA) verify airspace determination
 - f. Flight lines and battery allocation per objective
 - g. Ground truthing parameters
 - h. National Weather Service weather outlook chart
 - i. All clear (NOGO-GO) remote pilot in command signoff
 - j. Jobsite safety briefing checklist
 - k. Post processing deliverable archive
 - l. Any additional requirements based on proximity of the Jobsite to the nearest airport
 - m. Proof that the drone pilot will be properly licensed in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work
 - n. Proof of aviation specific liability insurance
 2. The drone pilot will be properly licensed in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations.
 3. The Contractor must provide proof of aviation specific liability insurance.
 4. The drone shall be manufactured in the United States of America.

3.5 CONFIDENTIALITY

- A. All media taken on the Jobsite is considered confidential and are not to be shared with any third party without the express written consent of the Owner.

END OF SECTION

SECTION 01 33 00 – SUBMITTAL PROCEDURES

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. The Contractor shall prepare, revise as required by the Owner reviews, and finalize all specified submittals. Submittals required for the Work are identified in the various Sections that comprise the Technical Specifications and shall be listed in the submittal register prepared for the project. Submittals include, but are not limited to, Work plans, schedules, worker qualifications and training documentation, permits, forms generated during the performance of the Work, data, certificates, manuals, manifests, and reports. The Owner may request submittals in addition to those specified in the Technical Specifications.
- B. Comments from the Owner on submittals, if any, will be transmitted to the Contractor via Submittal Comment Resolution Register (SCRR) in Microsoft Excel format. The Contractor shall respond to comments from the Owner in the SCRR document and submit the revised SCRR to the Owner. Resolution of all comments in the SCRR is required.
- C. Work plans and other pre-Work submittals (e.g., worker qualifications and training, permits, etc.) shall be provided to the Owner a minimum of 30 days prior to mobilization to the Jobsite, unless otherwise specified by the Owner.
- D. Following mobilization to the Jobsite, submittals such as activity- or area-specific Work plans shall be submitted well in advance of the scheduled start date for the Work but at a minimum no less than three weeks prior to the scheduled start date for the Work. Reports documenting Work performed, such as weekly progress report, shall be provided no later than end of the following Monday.
- E. No claims for schedule delays shall be allowed for insufficient submittals, submittals submitted less than three weeks prior to planned Work start dates, or failure to respond to and finalize submittal comments prior to planned Work start dates that may result in stoppage of Work.

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION

3.1 PREPARATION OF SUBMITTALS

- A. Submittals shall be complete and provide sufficient detail to readily allow determination of compliance with the Contract Documents, Technical Specifications, and applicable Federal, State, local law, ordinances, codes, rules and regulations.
- B. It is the Contractor's responsibility to review submittals made by the Contractor's suppliers and Subcontractors to assure compliance with the Contract Documents and Technical Specifications before transmitting them to the Owner.

3.2 TRANSMITTAL OF SUBMITTALS

- A. Upon execution of the Contract, the Owner's document control manager will provide instruction on the required submittal procedures. The Contractor's project manager and any employee(s) responsible for transmitting submittals shall attend an orientation meeting with the Owner's document control manager prior to transmitting submittals. It is the Contractor's responsibility to properly assign document tracking numbers as specified in this Section and in accordance with the instructions of the document control manager.
- B. Submittals shall be transmitted electronically in both Word format and Adobe Portable Document Format (PDF) into the Owner's designated web-based platform. Submittals will not be accepted via e-mail, unless otherwise instructed by the Owner. Permits and waste shipment records shall be provided to the Owner also in hard copy.
- C. A letter of transmittal shall accompany each submittal. At the beginning of each letter of transmittal Contractor shall provide a reference heading indicating the following:
 - 1. Owner's Name
 - 2. Project Name
 - 3. Contract Number
 - 4. Submittal Number
 - 5. Submittal Classification
 - 6. Submittal Description
- D. Submittals shall be classified as follows:
 - 1. Owner's Review
 - a. Required for information that must be reviewed to assess that the Contractor's proposed means and methods, materials, data collected in the field, and other relevant information meets the requirements of the Work and applicable Federal, State, local law, ordinances, codes, rules and regulations applicable to the Work.
 - 2. Information Only
 - a. For supplemental project information, such as worker training documentation.
- E. If a submittal deviates from the requirements of the Contract Documents and / or Technical Specifications, the Contractor shall specifically note each variation in the letter of transmittal.
- F. All submittals shall be assigned a tracking number and revision number. Tracking numbers shall correspond to the Section of the Technical Specifications for which the submittal is intended to satisfy the requirements. For example, Section 01 35 13 – Special Project Procedures, Part 1.4(B)(4) requires the Contractor to prepare and submit a health and safety plan. The tracking number for the initial submittal of this document is "013513.1.4.B.4_0" and the submittal file name shall be "013513.1.4.B.4_0-Health and Safety Plan," where "_0" is the revision number.

- G. Every submittal will be assigned a revision number, starting with zero and increasing sequentially for each additional revision. The revision number will be added after the document tracking number. For example, revision No. 2 to the health and safety plan will be submitted as "013513.1.4.B.4_2" and the submittal file name shall be "013513.1.4.B.4_2-Health and Safety Plan."
- H. Incomplete or inadequate submittals, or submittals received directly from sources other than the Contractor, such as Contractor's Subcontractor, shall be returned for revision without review.

3.3 OWNER REVIEW OF SUBMITTALS

- A. Each submittal or revision thereof will be reviewed by the Owner usually within 7 to 10 business days, but a maximum of 15 working days. However, complex submittals, such as some Work plans and summary reports, may require a lengthier review and a reasonable time should be allowed for review by the Owner, for the revision and retransmission of submittal by the Contractor, for re-review by the Owner, etc. until the submittal is accepted. Additional review time by the Owner may be required if multiple submittals require review during the same period.
- B. Comments from the Owner on submittals, if any, will be transmitted to the Contractor via SCRR in Microsoft Excel format. The Contractor shall first respond to comments from the Owner in the SCRR document and submit the revised SCRR to the Owner. Resolution of all comments in the SCRR is required as follows:
 - 1. For Work plans: prior to performing outlined Work
 - 2. For permits, waste profiles, or other documents submitted to a third party: prior to submitting permits to the regulatory agency, disposal facility, or other third party
 - 3. For worker qualifications: prior to allowing workers onsite
 - 4. For Contractor procured and installed items (e.g., imported fill, etc.): prior to delivery of materials to the Jobsite
 - 5. For construction and post-construction phase submittals (e.g., weekly progress reports, manifests, data, reports, etc.): for final acceptance of the Work
- C. Based on the type and number of Owner comments in the SCRR and the Contractor's responses in the SCRR, the Owner may accept the associated submittal with no revision of the submittal required. If a submittal has extensive comments or the Owner otherwise requests, the associated submittal shall be revised and resubmitted as specified. The Owner may request the Contractor to identify all changes made to revised submittals.
- D. Following resolution of the SCRR, each submittal will be returned to the Contractor marked with one of the following notations:
 - 1. Approved
 - 2. Approved with Changes Noted
 - 3. Approved with Changes Noted – Resubmit
 - 4. Returned for Correction
 - 5. Not Approved

6. Received

- E. If a submittal is acceptable, it will be marked "Approved" or "Approved with Changes Noted." Upon receipt, the Contractor may conduct Work in accordance with the submitted plan, schedule, or form.
- F. If a submittal has extensive corrections or corrections affecting other plans or Work, the Owner may require the Contractor to make the corrections indicated thereon and resubmit the plans or schedules for further review and / or record purposes. Such submittals shall have the notation, "Approved with Changes Noted – Resubmit."
- G. Upon return of a submittal marked "Returned for Correction," the Contractor shall make the corrections indicated and repeat the initial approval procedure.
- H. The "Not Approved" notation is used to indicate a submittal that is not acceptable. Upon return of a submittal so marked, the Contractor shall appropriately revise the submittal and repeat the initial approval procedure.
- I. The Contractor shall not commence with Work associated with a submittal unless the submittal is marked "Approved" or "Approved with Changes Noted." Any Work performed by the Contractor associated with a submittal not marked "Approved" or "Approved with Changes Noted" shall be at the sole risk and responsibility of the Contractor.
- J. The Owner's review of submittals is a general assessment for conformance with the Contract Documents and shall not be construed as a complete assessment or explicit endorsement of the means and methods for planned Work or conditions stated or implied in submittals. The review shall not relieve the Contractor of the responsibility for any error or omission of information which may exist, as the Contractor is responsible for the safe and satisfactory completion of the Work in accordance with the Contract Documents and all applicable Federal, State, local law, ordinances, codes, rules and regulations applicable to the Work.

3.4 RESUBMISSION OF SUBMITTALS

- A. Upon return of a submittal marked "Approved with Changes Noted – Resubmit," "Returned for Correction," or "Not Approved," the Contractor shall make the corrections indicated and repeat the initial transmittal procedure as specified.
- B. All changes in resubmittals shall be clearly identified for ease of review. Comments on the resubmittal from the Owner, if any, will be added to the SCRR for the original document. Additional comments from the Owner shall be responded to in the SCRR by the Contractor as specified.

END OF SECTION

SECTION 01 35 13 – SPECIAL PROJECT PROCEDURES

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. The Contractor shall perform the Work in accordance with all Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. As such, the Contractor shall:
1. Prepare and submit Work plans as specified to outline the Contractor's proposed sequencing, equipment, and methods for the completion of the Work. The Contractor's generic / standard Work plans shall be updated to include Jobsite-specific details and information.
 2. Prepare and submit all permits and notifications required for the performance of the Work, except as noted herein. The Contractor shall comply with all requirements stipulated in permits obtained by the Owner.
 3. Provide qualified personnel and Subcontractors to execute the Work in accordance with the Work plans, permit requirements, Contract Documents, and applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.
 4. Prepare and submit documentation as specified to document the Contractor's adherence to Technical Specifications and permit, regulatory, and / or Owner requirements during the execution of the Work.
- B. The Contractor shall be responsible for the development, implementation, and enforcement of health and safety protocols and procedures during the performance of the Work.
- C. The Contractor shall obtain all permits and perform all agency notifications required for the Work unless otherwise specified. Copies of permit applications and notifications shall be provided to the Owner for review prior to submittal to regulatory agencies. The Contractor is responsible for performing all Work in accordance with permit requirements.
- D. The Contractor shall prepare for approval, submittals specified in these Technical Specifications and other Contract Documents. Pre-construction submittals shall be submitted to the Owner 30 calendar days or more prior to planned mobilization to the Jobsite. No Work at the Jobsite shall be permitted until applicable submittals have been approved, required permits are in hand, and necessary notifications have been made and acknowledged by appropriate agencies.

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
1. Section 01 14 00 – Work Restrictions

2. Section 01 31 00 – Project Management and Coordination
 3. Section 01 32 00 – Project Controls Requirements
 4. Section 01 33 00 – Submittal Procedures
 5. Section 01 32 33 – Media Documentation
 6. Section 01 41 00 – Regulatory Requirements
 7. Section 01 71 00 – Jobsite Preparation
 8. Section 01 74 00 – Cleaning and Waste Management
 9. Section 02 84 00 – PCB-Containing Material Removal
- B. Work outlined in this Section shall be performed in accordance with all applicable Federal, State, local laws, ordinances, codes, rules, and regulations applicable to the Work. References to regulatory requirements are included in Section 01 41 00 – Regulatory Requirements. The Contractor shall comply with all authorities having jurisdiction over the Work.
- C. A collection of Jobsite Drawings is included in Appendix B to provide the Contractor details on the building, locations and details of utilities, and details on other features. Appendix B may not contain all pertinent details needed by the Contractor to perform the Work. It is the responsibility of the Contractor to request additional Drawings as necessary for the performance of the Work; however, due to the age of the school, additional Drawings may not be available. The Contractor shall have access to the Jobsite as requested by the Contractor. The Contractor shall have ultimate responsibility for locating all pertinent buildings, locations, details of utilities, and details of other features pertinent to the Work.

1.3 SITE WORK

- A. The Contractor shall certify that the employees of the Contractor and Contractor's Subcontractors are properly trained and licensed, as necessary, to perform the Work.
- B. The Contractor shall provide controls and measures for protection of the environment, including, but not limited to preventing contaminated storm water runoff, chemicals, demolition debris, dust, etc. from entering storm drains.
- C. The Contractor shall collect or assist the Owner in collecting data and performing inspections necessary to show compliance with all permits and Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.
- D. The Contractor shall notify the Owner of any chemicals / materials brought onsite. The Contractor shall track chemicals stored onsite and provide inventory lists and quantities to the Owner.
- E. The Contractor shall manage, transport, and dispose of waste and manage, transport, and recycle recyclable materials in accordance with all applicable Federal, State, local laws, ordinances, codes, rules, and regulations applicable to the Work. The Contractor shall utilize Owner-approved transportation contractors and disposal and recycling facilities.

1.4 SUBMITTALS

- A. The Contractor shall prepare and submit Work plans, reports, and other submittals outlined in this Section and throughout the Technical Specifications. Submittals shall be provided as required in Section 01 33 00 – Submittal Procedures.

- B. Pre-Construction Phase
 - 1. Personnel Qualifications
 - a. The Contractor shall submit qualification information as specified in Section 01 14 00 – Work Restrictions.
 - 2. Baseline Project Schedule
 - a. A baseline project schedule shall be prepared and submitted in accordance with Section 01 32 00 – Project Controls Requirements.
 - 3. Schedule of Values
 - a. A schedule of values shall be prepared and submitted in accordance with Section 01 32 00 – Project Controls Requirements.
 - 4. Health and Safety Plan (HASP)
 - a. The Contractor shall prepare and submit a Jobsite-specific HASP to the Owner for review. The HASP shall include the following elements:
 - i. A written description of the safe Work practices and engineering safeguards to be employed during the performance of the Work to protect Jobsite personnel, visitors, the public, and the environment
 - ii. The Contractor's health and safety organization which shall include the names, contact information, duties, and responsibilities of each person assigned to a health and safety function
 - iii. A health and safety organization chart showing relationships and lines of authority for Contractor and Contractor's Subcontractors
 - iv. A description of the qualifications, certifications, and additional training undertaken by the Contractor's site health and safety officer in demonstration of the proposed individual's qualifications for the position
 - v. A health and safety risk analysis for the Jobsite task and operation to be performed, summarizing the risk(s) anticipated to be present, level of protection selected for each task and rationale for each task specific selection, the level of personal protective equipment (PPE) required and articles of PPE included within the chosen level of protection, and any contaminant action levels to be followed in level of protection decision making
 - vi. An emergency response plan that outlines the procedures to be implemented during emergency situations. Emergency situations and responses to be addressed shall include the protocol to follow in the event of injury to onsite personnel requiring immediate medical attention; a phone contact list containing the names, addresses, telephone and cell numbers of the Contractor, Contractor's supervisor, and all other Contractor personnel who

may be required to assist; techniques and recommended procedure for immediate first aid emergency response with local medical facilities; and a map detailing the location and directions to the nearest confirmed hospital.

- vii. A respiratory protection plan documenting National Institute for Occupational Safety and Health (NIOSH) approvals for all respiratory protective devices to be utilized, including a list of approved components (parts) for each type of respirator, and a signed letter indicating all employees, if any, required to wear negative pressure respirators have been medically evaluated and fit tested in accordance with Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.
 - viii. A Hazard Communication (HAZCOM) program and a statement that all Contractor's project staff is trained in HAZCOM
 - ix. Safety data sheets (SDS) for all chemicals to be brought to the Jobsite prior to delivery of such materials
 - x. Forms to be completed by the Contractor during the performance of the Work to confirm compliance with Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.
5. Permits and Certifications
- a. The Contractor shall prepare and submit the following anticipated permit applications to the Owner for review; however, it is the Contractor's responsibility to identify and obtain all necessary permits for the Work. Upon approval by the Owner, the Contractor shall submit the permit applications to the appropriate regulatory agencies.
 - i. Local electrical, mechanical, plumbing permit if necessary for Contractor trailer(s)
 - ii. Local demolition permit
 - iii. City of Peoria erosion and storm water permit
 - iv. Illinois Environmental Protection Agency (EPA) National Emission Standards for Hazardous Air Pollutants (NESHAP) notification for demolition of structures / buildings
 - v. Illinois EPA NESHAP notification for abatement
 - vi. Illinois Division of Labor notification for abatement
6. Demolition Work Plan
- a. The Contractor shall prepare and submit a demolition Work plan to the Owner for review. The demolition Work plan shall include the following:
 - i. Proposed sequence, equipment, and methods for the completion of the following Work:
 - a.) Jobsite preparation, including temporary facilities, utilities, and specified controls, including fugitive dust and odor, traffic, etc. Layout and protections for main power wiring from City connections to the Contractor's area(s) of Work shall be included.
 - b.) Verification of de-energization of structures and features to be demolished and equipment contained therein
 - c.) Collection and removal of hazardous wastes, universal wastes, nonhazardous waste, used oil, and flaking paint /

- coating containing concentrations of lead and polychlorinated biphenyls (PCBs) as necessary and prior to commencing abatement and demolition
 - d.) Prevention of construction debris, fugitive dust, etc. from entering storm water systems
 - e.) Demolition of the structure, including concrete slabs, basement, and foundations
 - f.) Removal of below grade features and utilities
 - g.) Decontamination of equipment and materials, including description of equipment and procedures
 - h.) Backfill of excavations and the basement
 - i.) Restoration of the Jobsite
 - ii. A list of areas where scaffolding will be installed to allow safe access to areas of Work. Scaffolding designs, including layout, sequence of scaffold placement, weight limitations, protections, and training requirements for scaffold workers that will be installing and moving scaffolding as the Work progresses shall be provided in the Work plan. Engineered scaffolding plans by a licensed scaffolding Subcontractor, and signed by a Illinois-licensed Professional Engineer, shall be provided for scaffolding when required per 29 Code of Federal Regulations (CFR) 1926.
 - iii. Overview for proposed sequence and methods for completion of activities that are described in standalone Work plans, such as for asbestos-containing materials (ACM), PCB-containing materials, and lead in materials
 - iv. Air monitoring plan that details the proposed Jobsite boundary air monitoring and sampling requirements
 - v. A written description of the quality control measures to be implemented during the performance of the Work and a list of planned inspections and testing
 - vi. Site plan(s) showing:
 - a.) Locations of temporary facilities, utilities, and parking areas
 - b.) Locations of proposed construction entrances and temporary fencing / barriers
 - c.) Locations of proposed staging areas for equipment and materials
 - d.) Locations of proposed staging and storage areas for wastes
 - e.) Location(s) of decontamination pad
7. Crane Work Plan (if applicable)
- a. If used for the Work, the Contractor shall prepare and submit a crane Work plan to the Owner for review. The crane Work plan shall include the following:
 - i. Proposed sequence, equipment, methods, and quality assurance for the completion of the Work involving cranes
 - ii. Crane capabilities including weight limitations and operating conditions

- iii. Crane layout including exclusion zone, drop zone, protection for infrastructure, locations of support equipment (man baskets, JLG lift, etc.)
 - iv. Sub-grade evaluation / investigation information for placement and stability of crane use
 - v. Checklists and other quality assurance documents to be utilized during crane Work
 - vi. Licenses for crane operator(s)
 - vii. Certifications of competent employees responsible for crane operation
8. Asbestos Work Plan
- a. The Contractor shall prepare and submit an asbestos Work plan to the Owner for review. The asbestos Work plan shall be prepared by a State of Illinois asbestos contractor supervisor and shall include the following as needed:
 - i. Proposed sampling plan for identifying and confirming the presence / absence of asbestos in materials not previously tested
 - ii. Proposed sequence, equipment, and methods for the abatement of ACM, including negative pressure enclosures, mini enclosures, glove bags, worker decontamination, waste packaging and load-out, and transportation and disposal
 - iii. Methods for ensuring various containments that will be used, if any, will have both proper air changes, but also have sufficient negative air machines placed to reduce dead air areas
 - iv. Methods and protections for ensuring water generated during the performance of abatement Work, such as wash down water, does not enter floor drains, building sumps, storm drains, or other features that discharge to the onsite sewer system and / or storm water discharge systems
 - v. A list of areas where scaffolding will be installed to allow safe access to areas of Work. Scaffolding designs, including layout, sequence of scaffold placement, weight limitations, protections, and training requirements for scaffold workers that will be installing and moving scaffolding as the Work progresses shall be provided in the Work plan. Engineered scaffolding plans by a licensed scaffolding Subcontractor, and signed by a Illinois-licensed Professional Engineer, shall be provided for scaffolding when required per 29 CFR 1926.
 - vi. Drawings for each planned Work area that show:
 - a.) Layout of containment areas
 - b.) Exhaust routes
 - c.) Regulated area barriers
 - d.) Construction barriers
 - e.) Negative pressure air machine locations and quantity, if any
 - f.) Worker decontamination chambers
 - g.) Waste load-out areas
 - h.) Power access points

- i.) Make-up air placement
 - vii. Qualifications of asbestos testing laboratory, including a copy of the laboratory's quality control program which shall outline the laboratory's compliance with American Industrial Hygiene Association (AIHA), National Institute for Occupational Safety and Health (NIOSH), Proficiency Analytical Testing (PAT), and National Voluntary Laboratory Accreditation Program (NVLAP) programs
 - viii. Air monitoring program that details proposed sampling plan, sampling procedures, and field quality control procedures for each type of enclosure
 - ix. Contractor or Subcontractor's license- indicating current licensing by Illinois Department of Public Health (IDPH) as an asbestos abatement firm
 - x. IDPH licensing for all workers performing asbestos Work, including asbestos supervisor and asbestos worker accreditations; aa resume for the asbestos supervisor(s) shall be provided
 - xi. Records of medical monitoring and quantitative and qualitative respirator fit-test records for all personnel performing asbestos Work
9. Lead Work Plan
- a. The Contractor shall prepare and submit a lead Work plan to the Owner for review. The lead Work plan shall include the following:
 - i. Description of Work procedures, engineering controls, air monitoring, and decontamination procedures to identify, remove, and handle lead-containing materials; provide additional details on management of lead-containing materials when ACM and PCBs are also present
 - ii. Licensing of personnel designated to handle lead-containing materials
 - iii. Qualifications of testing laboratory for air and waste characterization samples
 - iv. Air monitoring program that details proposed sampling plan, sampling procedures, and field quality control procedures for each type of enclosure
10. PCB Work Plan
- a. The Contractor shall prepare and submit a PCB Work plan to the Owner for review. The PCB Work plan shall include the following:
 - i. Description of Work procedures, engineering controls, spill prevention and cleanup, and decontamination procedures to identify, remove, and handle PCB-containing materials, including PCB-containing paints / coatings, and PCBs in building materials; provide additional details on management of PCB-containing materials (bulk product waste) when ACM is also present
 - ii. Descriptions of materials and equipment to be used during collection, removal, and handling of PCB-containing materials, including sorbents, solvents, containers, and PPE; include SDSs for all sorbents and solvents

- iii. Routing plan which clearly identifies the routes proposed to transport PCB items from the point of generation to the offsite PCB disposal facility
 - iv. Description of measures that will be implemented to prevent spills during transportation
 - v. Qualifications, certifications, and / or training certificates of personnel designated to handle PCB-containing materials
 - vi. Qualifications of testing laboratory for air and waste characterization samples
11. Water Management Work Plan
- a. The Contractor shall prepare and submit a water management Work plan to the Owner for review. The water management Work plan shall include the following:
 - i. Proposed sequence, equipment, and methods for maintaining compliance with permits authorizing discharge. Required information includes:
 - a.) A written description how water generated during the Work will be collected, stored, characterized, managed, and disposed / discharged. Water includes water generated during abatement Work (shower and wash down) and demolition Work (wash down); water present that accumulates in the basement or excavations. A flowchart and description of tasks to evaluate and characterize water to allow, as approved by Owner and the Greater Peoria Sanitary District, water to be discharged overland or to sanitary sewer system, or transported offsite for disposal shall be included.
 - b.) Sizing and powering of pumps
 - c.) Sizing and protection of hoses and / or piping
 - d.) Planned filtration measures to prevent discharge of sediment overland or into sewers, if approved, or accumulation of sediment in containers and tanks
 - e.) Location(s) of planned storage area(s) depicted on a Drawing(s)
 - f.) Inspections to be performed during the collection, discharge (if approved), storage, and offsite transportation of water
12. Waste Management Plan
- a. The Contractor shall prepare and submit a waste management plan to the Owner for review. The waste management plan shall include the following elements:
 - i. A written description of the wastes to be generated during the performance of the Work, how they will be collected, characterized, stored, and managed, including labeling, quantification, and inspections. The Owner will review and approve all waste characterizations.
 - ii. Procedures for coordination of the Work with the Owner
 - iii. Locations of planned waste storage areas depicted on a Drawing

- iv. Name, address, location, and qualifications of the selected Owner-approved waste characterization laboratory
 - v. Name, address, location, and US Environmental Protection Agency (USEPA) identification numbers and other necessary regulatory identifications / qualifications of selected Owner-approved waste transporters and offsite disposal facilities
 - vi. Name, address, location, and other necessary regulatory identifications / qualifications of selected Owner-approved transporters and facilities for recycled materials
 - vii. Sample waste labels for all waste types
 - viii. Sample waste manifests and shipping documents for recyclables, hazardous and nonhazardous wastes
 - ix. Example forms to be completed by the Contractor during the performance of the Work to monitor waste storage locations
 - x. Procedure of how wastes and recyclable materials generated, stored, and shipped will be tracked and provided to the Owner
 - b. The waste management plan shall include procedures to be followed in the event contaminated soils are encountered during the removal of below grade features.
13. Fugitive Dust and Odor Control Plan
- a. The Contractor shall prepare and submit a fugitive dust and odor control plan to the Owner for review. The fugitive dust and odor control plan shall include the following elements:
 - i. A written description of the control measures the Contractor shall put in place to prevent fugitive dust and odor during the performance of the Work
 - ii. A written description of the additional control measures the Contractor shall put in place to prevent fugitive dust from entering storm water systems or migrating onto adjacent properties
 - iii. Proposed dust monitoring equipment, procedures, and action levels
 - iv. Example forms to be completed by the Contractor during the performance of the Work to monitor fugitive dust and odor control measures
14. Erosion and Sediment Control Plan
- a. The Contractor shall prepare and submit an erosion and sediment control plan to the Owner for review. The erosion and sediment control plan shall include the following elements:
 - i. A written description of the control measures the Contractor shall put in place and maintain to prevent erosion and control sediment during the performance of the Work
 - ii. A written description of the erosion and sediment control measure maintenance and inspection schedule
 - iii. Name and contact information of inspectors and certified operators
 - iv. Locations of areas that will be disturbed and erosion control measures depicted on a Drawing

- v. Schedule for implementation of the erosion control measures and inspections
 - vi. Forms and inspection records to be completed by the Contractor during the performance of the Work to monitor erosion and sediment control measures
15. Storm Water Pollution Prevention Plan (SWPPP)
- a. The Contractor shall prepare and submit a SWPPP to the Owner for review if required by permit. The SWPPP shall include the following elements. If a SWPPP is not required by permit, the Contractor shall prepare a storm water management plan including applicable elements.
 - i. A brief summary of the project Work
 - ii. A written description of the preventive measures and best management practices the Contractor shall put in place and maintain to prevent pollution of storm water during the performance of the Work
 - iii. Description of allowable non-storm water discharges
 - iv. Description of site stabilization measures to be implemented
 - v. Description of post construction storm water management
 - vi. Procedures for inspections, maintenance, and corrective actions
 - vii. Locations of pollution prevention measures depicted on a Drawing(s)
 - viii. Signed and dated SWPPP certification
 - ix. Certified storm water operator certifications for individuals (including contact information) responsible and in charge for implementing and maintaining compliance with the SWPPP
 - x. Form(s) and inspection record(s) to be completed by the Contractor during the performance of the Work to monitor storm water
16. Restoration Work Plan
- a. The Contractor shall prepare and submit a restoration Work plan to the Owner for review. The restoration Work plan shall include the following elements:
 - i. Proposed sequence, equipment, and methods for the completion of Jobsite restoration activities, including quantity and placement of imported fill (granular fill, aggregate, stone, etc.) to establish final sub grades and quantity and placement of topsoil to establish final grades
 - ii. Proposed sources and certifications for materials proposed to complete Jobsite restoration, including, but not limited to, imported fill, aggregate, topsoil, and seeding
 - iii. Proposed methods and equipment for soil compaction
 - iv. The name and qualifications of the Contractor's independent third-party testing laboratory to be used for borrow source testing (geotechnical) and in-place soil / construction materials testing
 - v. Geotechnical and analytical laboratory test reports for imported materials

17. Pre-Work Conditions Report
 - a. The Contractor shall submit a video-graphic record of the Jobsite and conditions surrounding the Contractor's designated Work area prior to initiating Work at the Jobsite. The record shall include the condition of all existing driveways, sidewalks, curbs, ditches, shrubbery, structures, utility structures / poles, and other features located at the Jobsite and surrounding area.
 - b. Additional details for the pre-Work conditions report are specified in Section 01 71 00 – Jobsite Preparation.
 18. Other pre-construction, Work-specific submittals specified herein. The Contractor is required to prepare a Spill Prevention, Control and Countermeasures (SPCC) Plan if planned onsite storage of oil / fuel exceeds the regulatory threshold.
- C. Construction Phase
1. Utility Locating Documentation
 - a. The Contractor shall submit utility locating documentation in accordance with Section 01 71 00 – Jobsite Preparation.
 2. Hazardous Chemical Inventory
 - a. The Contractor shall maintain an updated chemical inventory list throughout the performance of the Work. Specific information for each chemical, in the form of SDS, and the PPE required for working with the materials (respirators, special clothing, etc.) shall be included.
 - b. The Contractor shall revise the list as necessary (i.e., when new Owner-approved chemicals are brought onto or produced at the Jobsite), with updates forwarded to the Owner.
 - c. A complete and accurate copy of this information shall be immediately available at the Contractor's Jobsite office during working hours for reference by the Owner, regulatory agencies, Contractor's employees, and Contractor's Subcontractor's employees.
 3. Analytical Data Reports
 - a. The Contractor shall collect samples for chemical analysis and / or Polarized Light Microscopy analysis as required for the Work. Sampling shall be performed as follows:
 - i. When materials are encountered that are suspected to contain asbestos and have not been previously sampled and characterized
 - ii. For waste characterization and profiling purposes
 - iii. For materials as requested by the Owner
 - b. Chemical analysis shall be performed by an Owner-approved accredited laboratory.
 - c. A map or figure showing the sample collection location shall be provided with the analytical data report.
 - d. Photographs of sample locations shall be provided with the analytical data report. Requirements for photographs are specified in Section 01 32 33 – Media Documentation.

- e. The Contractor shall notify the Owner prior to collecting samples and the Owner shall be present when samples are collected. Samples collected without notifying the Owner or without an Owner's representative present may be rejected.
 - f. The laboratory shall provide the analytical results with supplemental data, such as equipment calibration data, so that analytical results may be validated.
4. Waste Management Documentation
- a. Waste management documentation including, but not limited to, waste profiles, manifests, waste inventory log, etc. shall be submitted in accordance with Section 01 74 00 – Cleaning and Waste Management.
5. Imported Material Weigh Tickets
- a. Weigh tickets shall be submitted for all materials brought to the Site including but not limited to granular fill, other fill, aggregate, and topsoil.
 - b. Weigh tickets shall be tracked on a daily basis and submitted on a weekly basis.
6. Field In-Place Density (Compaction) Test Reports
- a. In-place density testing results shall be submitted weekly.
7. Other construction-phase submittals specified in the Technical Specifications.
8. Work Plan Updates
- a. Specified Work plans shall be updated as necessary during the performance of Work when any of the following conditions occur, or as directed by the Owner. The revised Work plan(s) shall be submitted to the Owner for review and approval prior to initiating change.
 - i. A deviation to initially proposed sequencing, equipment, or methods will allow the Work to be performed more safely and / or more efficiently while still meeting the intent of the Work
 - ii. Conditions encountered during the performance of a task necessitate a deviation in initially proposed sequencing, equipment, or methods
 - iii. New Work tasks are added to the scope of Work
 - b. Revised sequencing, equipment, or methods shall be performed in accordance with all Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work
 - c. The Owner, at its discretion, shall require either an addendum to the existing Work plan(s) or require a complete resubmittal
9. Progress Reports
- a. The Contractor shall prepare and submit a weekly progress report to the Owner as outlined in Section 01 32 00 – Project Controls Requirements.
10. Invoices
- a. The Contractor shall prepare and submit invoices to the Owner as outlined in Section 01 32 00 – Project Controls Requirements.

D. Post-Work Phase

1. Remaining ACM Summary Report
 - a. The Contractor shall prepare and submit a remaining ACM summary report to the Owner for review if ACMs remain that could not be abated (e.g., underground pipe with ACM coating extends beyond the Jobsite boundary). The remaining ACM summary report shall be prepared by the Contractor's asbestos project designer and include the following:
 - i. A written description of the below grade ACMs left in place
 - ii. A Jobsite map showing locations of ACMs left in place
 - iii. Photographs of the ACMs
2. PCB Summary Report
 - a. A PCB summary report shall be prepared and submitted in accordance with Section 02 84 00 – PCB-Containing Material Removal.
3. Construction Summary Report
 - a. The Contractor shall prepare and submit a construction summary report to the Owner for review. The construction summary report shall include the following:
 - i. Summary of sequence, equipment, and methods performed for the completion of the following Work:
 - a.) Jobsite preparation
 - b.) Collection of ACM, universal, PCB, hazardous waste, and nonhazardous waste and final quantities disposed and / or recycled offsite
 - c.) Demolition of the building, including basement and foundations, and final quantities of construction and debris (C&D) waste disposed and recycled offsite
 - d.) Removal and / or abandonment of below grade features and utilities
 - e.) Backfill of excavations, the basement, and Jobsite restoration, including quantities of imported fill, aggregate, and topsoil
 - f.) Appendices containing inspection reports, laboratory test reports, and signed waste shipment records
4. Permit Closeout Reporting
 - b. The Contractor shall submit permit closure documentation provided by regulatory agencies.
5. Certification that all Subcontractors and suppliers have been paid in full and that there are no pending claims resulting from the Work performed.
6. Final application for payment.

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION (Not used)

END OF SECTION

SECTION 01 41 00 – REGULATORY REQUIREMENTS

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. All Work shall be accomplished in strict accordance with Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. The most recent edition of any relevant regulation, ordinance, code, law, or standard, shall be in effect during the Work, regardless of the effective date of this Technical Specification's governing Contract. Where conflict among the requirements or with these Technical Specifications exists, the most stringent requirements shall be utilized.
- B. All activities and equipment shall comply with US Department of Labor (USDOL), Occupational Safety and Health Administration (OSHA) and Illinois OSHA regulations. All injuries shall be reported in accordance with applicable reporting requirements. Additionally, a copy of injury reports shall be promptly provided to the Owner.
- C. The Contractor shall prevent, control, and abate all environmental pollution, including air, water, dust, and noise arising from Work activities by complying with all applicable Federal, State, local laws, ordinances, codes, rules and regulations concerning environmental pollution control and abatement.
- D. The Contractor's Work activities shall be performed by methods that will prevent entrance or accidental spillage of contaminants, debris, and other objectionable pollutants and wastes into storm water systems or onto adjacent properties.
- E. Contractor's Work activities shall be performed by methods that will prevent exacerbation of potential pre-existing environmental conditions on the property.
- F. Wastes shall be handled according to all applicable Federal, State, local laws, ordinances, codes, rules and regulations. Waste transporters and disposal facilities shall be Owner-approved, licensed by appropriate authorities, permitted by appropriate authorities, and in compliance with all Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.
- G. The Contractor shall perform inspections / reviews as required by Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work to assure compliance with same.

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
 - 1. Section 01 32 00 – Project Controls Requirements
 - 2. Section 01 33 00 – Submittal Procedures

1.3 SUBMITTALS

- A. Inspections performed by the Contractor, as required by the Contract Documents, Technical Specifications, and / or Federal, State, and local rules, ordinances, codes, rules and regulations, shall be included in the Contractor's weekly progress report, as specified in Section 01 32 00 – Project Controls Requirements.
- B. Inspection forms provided by regulatory agencies and meeting minutes for any meetings held with regulatory agencies shall be included in the Contractor's weekly progress report, as specified in Section 01 32 00 – Project Controls Requirements.
- C. Submittals shall be submitted as specified in Section 01 33 00 – Submittal Procedures.

1.4 REGULATIONS

- A. All applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work are deemed to be included herein the same as though written in full. The Contractor shall comply with all authorities having jurisdiction over the Work. The following list of rules and regulations does not necessarily include all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. All regulations listed shall be as amended.
 - 1. USDOL OSHA
 - a. 29 CFR 1910 Occupational Safety and Health Standards
 - b. 29 CFR 1915 Occupational Safety and Health Standards for Shipyard Employment
 - c. 29 CFR 1918 Safety and Health Regulations for Longshoring
 - d. 29 CFR 1919 Gear Certification
 - e. 29 CFR 1926 Safety and Health Regulations for Construction
 - 2. US Department of Transportation (DOT)
 - a. 49 CFR Parts 100-185 Hazardous Materials Regulations
 - b. 49 CFR Parts 325-399 Federal Motor Carrier Safety Regulations (as applicable to hazardous materials)
 - 3. US Environmental Protection Agency (USEPA)
 - a. 40 CFR Part 61 National Emission Standards for Hazardous Air Pollutants
 - b. 40 CFR Part 112 Oil Pollution Prevention
 - c. 40 CFR Part 122 NPDES
 - d. 40 CFR Part 123 State NPDES Requirements
 - e. 40 CFR Part 124 NPDES Decision Making
 - f. 40 CFR Part 172 Experimental Use Permits
 - g. 40 CFR Part 241 Storm Water Discharges
 - h. 40 CFR Part 260 Hazardous Waste Management System: General
 - i. 40 CFR Part 261 Identification and Listing of Hazardous Waste
 - j. 40 CFR Part 262 Standards Applicable to Generators of Hazardous Waste

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k.	40 CFR Part 263	Standards Applicable to Transporters of Hazardous Waste
l.	40 CFR Part 264	Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
m.	40 CFR Part 265	Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities
n.	40 CFR Part 266	Standards for the Management of Specific Hazardous Waste and Specific Types of Hazardous Waste Management Facilities
o.	40 CFR Part 268	Land Disposal Restrictions
p.	40 CFR Part 273	Standards for Universal Waste Management
q.	40 CFR Part 279	Standards for the Management of Used Oil
r.	40 CFR Part 423	Steam Electric Power Generating Point Source Category
s.	40 CFR Part 761	Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions
t.	40 CFR Part 763	Asbestos
u.	EPA 530/F-93/004	Test Methods for Evaluating Solid Waste (Vol. IA, I1B, IC, and II)
v.	EPA 530-SW-85-007	Asbestos Waste Management Guidance
w.	EPA 540/2-85/003	Dust Control at Hazardous Waste Site
x.	EPA 560/5-84/005	Evaluation of the EPA Asbestos-in-Schools Identification and Notification Rule
y.	EPA 560/5-84/006	Asbestos in Buildings: National Survey of Asbestos-Containing Friable Materials
z.	EPA 560/5-85/018	Asbestos in Buildings: Guidance for Service and Maintenance Personnel
aa.	EPA 560/5-85/024	Guidance for Controlling Asbestos-Containing Materials in Buildings
bb.	EPA 560/5-85/030	Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials
cc.	EPA 560-OPTS-86-001	A Guide to Respiratory Protection for the Asbestos Abatement Industry
dd.	EPA 832-R-92-005	Storm Water Management for Construction Activities
ee.	EPA 833-R-060-04	Developing Your Storm Water Pollution Prevention Plan, A Guide for Construction Site
ff.	EPA C00090	Asbestos-Containing Materials in Buildings – A Guidance Document
gg.	Order No. 14402	Health and Safety Requirements for Personnel Engaged in Field Activities
hh.	Standard Operating Safety Guides, November 1984	

4. State of Illinois
 - a. Illinois Administrative Code
 - b. Illinois Department of Public Health (IDPH)
 - Worker Licensing and Permitting
 - c. Illinois DOT
 - Commercial Drivers
 - Statewide Truck Restrictions
 - Highway Permits
 - Standard Specifications for Road and Bridge Construction
 - d. Illinois EPA
 - 415 Illinois Compiled Statutes 5
 - e. Illinois OSHA
 - Occupational Health and Safety Act
5. Local
 - a. Ascertain and comply with all applicable county and municipal ordinances, codes, rules and regulations including:
 - i. Peoria
 - a) Building Permits and Inspection Department
 - i. Demolition
 - ii. Excavation
 - iii. Utility
 - iv. Sediment and erosion control
 - b) Public Works Department
 - i. Wastewater discharge
 - c) Engineering Department
 - i. Any activities planned within a Right-of-Way
 - ii. Greater Peoria Sanitary District
 - i. Wastewater discharge permit
 - iii. Peoria County
 - a) Assessor Office
 - i. Property assessment review form
 - b. Comply with seasonal load limits which may be imposed to cover transportation on certain roads.
 - c. Comply with all applicable utility-owner requirements.
6. Other Codes, Standards, and Guidance Documents
 - a. American Concrete Institute (ACI) standards
 - b. American Hardboard Association (AHA) standards
 - c. American National Standards Institute (ANSI), Protective Footwear, Z41.1, 1983
 - d. ANSI, Practices for Occupational and Educational Eye and Face Protection, Z87.1, 1979
 - e. ANSI, Practices for Respiratory Protection, Z88.2, 1980
 - f. ANSI, Respirator Use Physical Qualifications for Personnel, Z88.6, 1984
 - g. ANSI, Emergency Eyewash and Shower Equipment, Z358.1, 1981.
 - h. ANSI, Standard for Safety Colors, Z535.1, 2011
 - i. American Petroleum Institute (API) recommended practices
 - j. American Society of Civil Engineers (ASCE) Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data (CI / ASCE 38-02)

- k. ASTM International (ASTM) standards
 - l. American Water Works Association (AWWA) standards
 - m. Associated General Contractors of America (AGC) "Manual of Accident Prevention in Construction"
 - n. Chain Link Fence Manufacturer's Institute (CLMI) standards
 - o. International Building Code (IBC) "Basic Building Code"
 - p. National Institute of Standards and Technology Handbook 44, Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices
 - q. National Fire Protection Association (NFPA) 30, Flammable and Combustible Liquids Code (2012 edition), as amended
 - r. NFPA 30A, Code for Motor Fueling Dispensing Facilities and Repair Garages (2012 edition), as amended
 - s. NFPA 37, Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines (2010 edition), as amended
 - t. NFPA 70, National Electrical Code
 - u. NFPA 241, Standard for Safeguarding Construction, Alteration, and Demolition Activities
 - v. USACE EP 1110-1-16 Engineering and Design: Handbook for the Preparation of Storm Water Pollution Prevention Plans for Construction Activities
 - w. US Federal Highway Administration (USFHWA) Manual on Uniform Traffic Control Devices
- B. This project is supported by federal funds and must follow the following guidelines in accordance with the Consolidated Appropriations Act 2022:
- 1. Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (2 CFR Part 200). The requirements of 2 CFR Part 200 apply to all CPF awards. Grantees are encouraged to review the provisions of these regulations including provisions related to:
 - a. Suspension and debarment at 2 CFR 200.214
 - b. Prohibition on certain telecommunications and video surveillance services or equipment at 2 CFR 200.216
 - c. Financial management, internal controls, and Federal payment requirements at 2 CFR 200.302, 200.303, and 200.305
 - d. Program Income requirements at 2 CFR 200.307*
 - e. Revision of budget and program plans at 2 CFR 200.308 Disposition of property acquired with CPF funds at 2 CFR §200.311 Procurement requirements at 2 CFR §200.317-327
 - f. Record retention and access requirements at 2 CFR 200.334- 200.338
 - g. Reporting requirements at 2 CFR 200.328-200.330, including on the status of property acquired with CPF funds at 2 CFR §200.330
 - h. Subrecipient monitoring and management at 2 CFR 200.331- 200.333
 - i. Remedies for Noncompliance at 2 CFR 200.339- 200.343
 - j. Closeout of federal grants at 2 CFR §200.344-346
 - k. Cost Principles at 2 CFR Part 200, subpart E
 - l. Audit requirements at 2 CFR Part 200, subpart F

*For purposes of all CPF awards, program income must be used for the purposes and under the conditions of the grantee's specific CPF award in accordance with the addition requirements at 2 CFR 200.307(e)(2). In accordance with 2 CFR 200.307(b), costs incidental to the generation of program income may be deducted from gross income to determine program income for purposes of your CPF grant, provided these costs have not been charged to the Federal award. Further technical assistance will be provided to grantees with projects that may generate program income.

2. Economic Opportunities for Low-and Very Low-income Persons: Section 3 Requirements (24 CFR Part 75) and Indian Preference.
 - a. The requirements of Section 3 of the Housing and Urban Development Act of 1968 found at 24 CFR Part 75 apply to all grant recipients that are awarded \$200,000 or more for projects involving housing construction, rehabilitation, or other public construction. Section 3 of the Housing and Urban Development Act of 1968 (Section 3), 12 U.S.C. 1701u (Economic Opportunities for Low- and Very Low-Income Persons in Connection with Assisted Projects), and the HUD regulations at 24 CFR Part 75, ensure, to the greatest extent feasible, that training, employment, contracting and other economic opportunities be directed to low- and very low-income persons, especially recipients of government assistance for housing, and to businesses that provide economic opportunities to low-and very low-income persons where a proposed project is located.
3. Generally Applicable HUD Requirements (24 CFR Part 5, subpart A and 24 CFR 1000.12)
 - a. CPF grantees and their subrecipients must comply with the generally applicable HUD and CPD requirements in 24 CFR Part 5, subpart A, including all applicable fair housing, and civil rights requirements. Grants to Tribes and TDHEs are subject to the nondiscrimination requirements in 24 CFR 1000.12 in lieu of the nondiscrimination requirements in 24 CFR 5.105(a).
4. Davis Bacon and Related Acts (DBRA)
 - a. Compliance with Davis Bacon and Related Acts (DBRA) is not a condition or requirement for CPF grants but may be required if your project is also supported by other funds which do require adherence to the DBRA.
5. Suspension and Debarment
 - a. The governmentwide debarment and suspension regulations in 2 CFR Part 180 apply as incorporated and supplemented by HUD's implementing regulations in 2 CFR Part 2424. These regulations restrict awards, subawards, and contracts with certain parties that are debarred, suspended, or otherwise excluded from or ineligible for participation in Federal assistance programs or activities.
6. Conflicts of Interest
 - a. Conflicts Subject to Procurement Regulations. In the procurement of property or services by recipients and subrecipients, the conflict-of-interest rules in 2 CFR 200.317 and 2 CFR 200.318(c) shall apply. In all cases not governed by 2 CFR 200.317 and 2 CFR 200.318(c), recipients and subrecipients must follow the requirements contained in paragraphs ii-v below.

- b. General prohibition. No person who is an employee, agent, consultant, officer, or elected or appointed official of the recipient or subrecipient and who exercises or has exercised any functions or responsibilities with respect to assisted activities, or who is in a position to participate in a decision making process or gain inside information with regard to such activities, may obtain a financial interest or benefit from the activity, or have a financial interest in any contract, subcontract, or agreement with respect thereto, or the proceeds thereunder, either for himself or herself or for those with whom he or she has immediate family or business ties, during his or her tenure or for one year thereafter. Immediate family ties include (whether by blood, marriage or adoption) the spouse, parent (including a stepparent), child (including a stepchild), brother, sister (including a stepbrother or stepsister), grandparent, grandchild, and in-laws of a covered person.
- c. Exceptions. HUD may grant an exception to the general prohibition in paragraph (ii) upon the recipient's written request and satisfaction of the threshold requirements in paragraph (iv), if HUD determines the exception will further the Federal purpose of the award and the effective and efficient administration of the recipient's program or project, taking into account the cumulative effects of the factors in paragraph (v).
- d. Threshold requirements for exceptions. HUD will consider an exception only after the recipient has provided the following documentation: a. A disclosure of the nature of the conflict, accompanied by an assurance that there has been public disclosure of the conflict and a description of how the public disclosure was made; and b. An opinion of the recipient's attorney that the interest for which the exception is sought would not violate state or local law.
- e. Factors to be considered for exceptions. In determining whether to grant a requested exception after the recipient has satisfactorily met the threshold requirements in paragraph (iii), HUD will consider the cumulative effect of the following factors, where applicable: a. Whether the exception would provide a significant cost benefit or an essential degree of expertise to the program or project that would otherwise not be available; b. Whether an opportunity was provided for open competitive bidding or negotiation; c. Whether the person affected is a member of a group or class of low- or moderate-income persons intended to be the beneficiaries of the assisted activity, and the exception will permit such person to receive generally the same interests or benefits as are being made available or provided to the group or class; d. Whether the affected person has withdrawn from his or her functions or responsibilities, or the decision-making process with respect to the specific assisted activity in question; e. Whether the interest or benefit was present before the affected person was in a position as described in paragraph (ii); f. Whether undue hardship will result either to the recipient or the person affected when weighed against the public interest served by avoiding the prohibited conflict; and g. Any other relevant considerations.
- f. Disclosure of potential conflicts of interest. Recipients must disclose in writing to your CPF Grant Officer any potential conflict of interest.

7. Build America, Buy America:
 - a. Recipients of an award of Federal financial assistance from a program for infrastructure are required to comply with the requirements of the Build America, Buy America (BABA) Act. Pursuant to the General Applicability Waiver of Build America, Buy America Provisions as Applied to Recipients of HUD Federal Financial Assistance (87 FR26219), any funds obligated on or after November 14, 2022, must comply with section 70914 of the Act.
- C. The Contractor shall also follow guidance documents provided by Federal, State and local entities such as USEPA guidance documents, USACE manuals, and State of Illinois memos and administrative circulars.
- D. The Contractor shall be responsible for complying with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work and pertaining to roads, bridges, and related items in the project vicinity, as directed by the public agency having jurisdiction. Requirements for maintenance of traffic in a safe manner such as signs, barricades, lights, watchmen, etc., shall be met as required. Load limits and other restrictions shall be obeyed. The Contractor shall contact the local entity such as Township, City, regional, County, State, etc., having jurisdiction in the project vicinity to ensure the Contractor is aware of any requirements of such entities. These requirements are between the entity and the Contractor.

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION

3.1 INSPECTIONS / REVIEWS

- A. Performed by Contractor
 1. The Contractor shall perform inspections / reviews as required by Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work and as necessary to assure compliance with same.
 2. Observations made during inspections / reviews shall be documented in the weekly progress report submitted to Owner.
- B. Performed by Regulatory Agency
 1. All activities included in the performance of the Work shall be subject to review and / or inspection by the appropriate Federal, State, and local jurisdictions and agencies, including without limitation: OSHA, Illinois OSHA, USEPA, Illinois EPA, and local health officials.

2. It is the responsibility of the Contractor to arrange for and coordinate the presence of the applicable Federal, State or local regulatory jurisdiction(s) and agency(ies) for Work where a representative must be present to perform a review and / or inspection. The Contractor shall notify the Owner when such regulatory jurisdiction(s) and agency(ies) are scheduled to be present at the Jobsite.
3. The Contractor shall maintain and supply at all times complete sets of equipment, such as respirators and disposable clothing that may be required for entry to controlled Work areas by such jurisdiction(s) and agency inspectors, as well as for the Owner's representatives.
4. If during such an inspection or review the Contractor is found to be in violation of applicable regulations, the Contractor shall cease all affected Work immediately until the violation is resolved. Standby time and costs related to resolving the violation shall be at the Contractor's expense.
5. If any agency(ies) or jurisdiction(s) require / request additional Work to be performed or measures to be implemented based on inspections / reviews made during Jobsite visits, then any and all costs incurred to meet such requirements / requests shall be at the Contractor's expense.
6. The Contractor shall provide copies of all documents / information relating to such inspection or review, including, but not limited to field notes, citation reports, agency / jurisdiction inspection / review reports, and pre-inspection / review and post-inspection / review meeting notes / attendance sheets, and Contractor summary reports. This documentation shall be submitted with the weekly progress report, as specified in Section 01 32 00 – Project Controls Requirements.

END OF SECTION

SECTION 01 51 00 – TEMPORARY UTILITIES

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. The Contractor shall provide necessary connections, controls, and protections to connect to existing utilities, including:
 - 1. Electrical
 - 2. Potable water
 - 3. Non-potable water
 - 4. Storm sewer
 - 5. Sanitary sewer
- B. The Contractor shall be responsible for providing their own wireless data and voice service.
- C. The Contractor shall verify all buildings, structures, utilities, equipment, wiring, etc. are de-energized prior to demolition.
- D. The Contractor shall make all necessary arrangements and obtain all necessary permits for utility connections. Utility connections shall comply with all Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.
- E. It is the responsibility of the Contractor to convey safely and in accordance with applicable Federal, State, local laws, ordinances, codes, rules and regulations utilities necessary for the performance of the Work from connection points to the areas of Work.
- F. Utility locating services shall be performed as specified prior to installation of any temporary utilities below grade.
- G. The Contractor shall provide clean potable water for use by Contractor's personnel, Contractor's Subcontractor's personnel, and authorized visitors.
- H. The Contractor shall provide and maintain adequate number of sanitary, chemical type, temporary toilets for the use by Contractor's personnel, Contractor's Subcontractor's personnel, and authorized visitors. These facilities shall conform to the requirements of all Federal, State, local laws, ordinances, codes, rules and regulations, and shall be kept clean and maintained in good working order at all times.
- I. Upon completion of the Work, the Contractor shall remove all temporary utilities and restore the Jobsite as specified.

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:

1. Section 01 32 00 – Project Controls Requirements
 2. Section 01 33 00 – Submittal Procedures
 3. Section 01 35 13 – Special Project Procedures
 4. Section 01 41 00 – Regulatory Requirements
 5. Section 02 00 00 – Existing Conditions
 6. Section 01 71 00 – Jobsite Preparation
 7. Section 01 74 00 – Cleaning and Waste Management
 8. Section 31 20 00 – Earthwork
- B. Work outlined in this Section shall be performed in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. References to regulatory requirements are included in Section 01 41 00 – Regulatory Requirements. The Contractor shall comply with all authorities having jurisdiction over the Work.
- C. A collection of Jobsite Drawings is included in Appendix B to provide the Contractor details on the building, locations and details of utilities, and details on other features. Appendix B may not contain all pertinent details needed by the Contractor to perform the Work. It is the responsibility of the Contractor to request additional Drawings as necessary for the performance of the Work; however, due to the age of the school, additional Drawings may not be available. The Contractor shall have access to the Jobsite as requested by the Contractor. The Contractor shall have ultimate responsibility for locating all pertinent buildings, locations, details of utilities, and details of other features pertinent to the Work.

1.3 SUBMITTALS

- A. Work to be performed for temporary utilities shall be outlined in appropriate Work plans specified in Section 01 35 13 – Special Project Procedures.
- B. Work performed and progress during installation of temporary utilities shall be summarized in the weekly progress report, as specified in Section 01 32 00 – Project Controls Requirements.
- C. Permits shall be submitted as specified in Section 01 35 13 – Special Project Procedures.
- D. Submittals shall be submitted as specified in Section 01 33 00 – Submittal Procedures.

1.4 PERMITS, LICENSES, CERTIFICATIONS

- A. The Contractor is responsible for obtaining necessary permits. Temporary modifications to Jobsite plumbing, electrical, sewer, and other utility systems may require a permit from the City of Peoria. Temporary heating of structures may also require a permit from the City.
- B. The Contractor shall comply with permit requirements. Permit fees and any fines levied for noncompliance with permit requirements shall be the responsibility of the Contractor.

1.5 HEALTH AND SAFETY

- A. The Contractor shall comply with all applicable Federal, State, and local health, safety, and environmental standards, regulations, rules or guidelines. Contractor health and safety requirements shall conform to 29 Code of Federal Regulations (CFR) 1910, 29 CFR 1926, and other applicable regulations.
- B. The Contractor shall perform excavation and other earthwork activities in accordance with their health and safety plan and additional requirements specified in Section 01 35 13 – Special Project Procedures and Section 31 20 00 – Earthwork.

1.6 QUALITY CONTROL

- A. The Contractor shall perform sufficient inspections, tests, and similar quality control services for all items of Work, on a continuing basis, including that of Subcontractors, to ensure conformance to applicable Technical Specifications and Drawings with respect to the quality of materials, workmanship, construction, and functional performance.
- B. The Contractor shall perform excavation and other earthwork activities in accordance with their Work plans, such as their construction Work plan and any additional requirements specified in Section 01 35 13 – Special Project Procedures.

PART 2 – PRODUCTS

2.1 EQUIPMENT

- A. The Contractor shall provide, power, operate, control, and maintain all equipment necessary for the performance of the Work. Equipment shall be operated and maintained in accordance with manufacture's recommendations and requirements.
- B. Backflow preventers shall be reduced pressure principle-type conforming to American Water Works Association (AWWA) standards and utility provider requirements.

2.2 MATERIALS

- A. The Contractor shall provide all necessary materials to perform the Work. Materials shall be delivered to the Jobsite; handled, stored, and protected; and utilized as specified by manufacturer's recommendations and requirements.

PART 3 – EXECUTION

3.1 EXISTING CONDITIONS

- A. The Contractor shall evaluate existing conditions in areas of Work as specified in Section 02 00 00 – Existing Conditions to identify, evaluate, control, and mitigate hazards present or that may be encountered during the Work.

- B. Prior to commencing any ground intrusive Work, the Contractor shall perform utility locating as specified in Section 01 71 00 – Jobsite Preparation. All earthwork activities, if any, shall be performed in accordance with Section 31 20 00 – Earthwork.

3.2 UTILITY SERVICES SETUP BY CONTRACTOR

- A. No utility connections onsite are currently active. If during the performance of the Work the Contractor determines that a connection to a utility service is required, such as water for abatement Work, wastewater discharge to the Greater Peoria Sanitary District sanitary sewer, or electricity, the Contractor shall setup and pay billings associated with use of utilities supplied by City or other Contractor-setup utility providers. Work with the City shall be coordinated with the Owner.
- B. It is the responsibility of the Contractor to coordinate the presence of City or utility provider representatives for Work where a representative must be present to perform an inspection. The Contractor shall notify the Owner when regulatory agency and local municipal representatives are scheduled to be present at the Jobsite.

END OF SECTION

SECTION 01 52 00 – CONSTRUCTION FACILITIES

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. The Contractor shall furnish and install all temporary facilities and controls required for the performance of the Work. Temporary facilities and controls include, but are not limited to:
 - 1. Trailers for Contractor's office, storage, and personnel shelter
 - 2. Safety equipment and signage
 - 3. Construction of containment areas, including for solid and liquid waste storage, and decontamination areas; including adequate secondary containment
 - 4. Setup of machinery and equipment fueling area, including adequate secondary containment
- B. Facilities and controls shall comply with all Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.
- C. The Contractor shall secure all necessary permits associated with the installation and operation of temporary facilities during the performance of the Work.
- D. Upon completion of the Work, the Contractor shall remove all temporary facilities and controls and restore the Jobsite as specified.

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
 - 1. Section 01 33 00 – Submittal Procedures
 - 2. Section 01 35 13 – Special Project Procedures
 - 3. Section 01 41 00 – Regulatory Requirements
 - 4. Section 01 71 00 – Jobsite Preparation
 - 5. Section 01 74 00 – Cleaning and Waste Management
 - 6. Section 02 00 00 – Existing Conditions
 - 7. Section 31 20 00 – Earthwork
- B. Work outlined in this Section shall be performed in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. References to regulatory requirements are included in Section 01 41 00 – Regulatory Requirements. The Contractor shall comply with all authorities having jurisdiction over the Work.

- C. A collection of Jobsite Drawings is included in Appendix B to provide the Contractor details on the building, locations and details of utilities, and details on other features. Appendix B may not contain all pertinent details needed by the Contractor to perform the Work. It is the responsibility of the Contractor to request additional Drawings as necessary for the performance of the Work; however, due to the age of the school, additional Drawings may not be available. The Contractor shall have access to the Jobsite as requested by the Contractor. The Contractor shall have ultimate responsibility for locating all pertinent buildings, locations, details of utilities, and details of other features pertinent to the Work.

1.3 SUBMITTALS

- A. Work to be performed for temporary facilities shall be outlined in appropriate Work plans specified in Section 01 35 13 – Special Project Procedures.
- B. Signed permits obtained by the Contractor, as specified in Section 01 35 13 – Special Project Procedures
- C. Submittals shall be provided as required in Section 01 33 00 – Submittal Procedures.

1.4 PERMITS, LICENSES, CERTIFICATIONS

- A. The Contractor is responsible for obtaining necessary permits. Temporary modifications to Jobsite plumbing, electrical, sewer, and other utility systems may require a permit from the City of Peoria. Temporary heating of structures may also require a permit from the City of Peoria.
- B. The Contractor shall comply with permit requirements. Permit fees and any fines levied for noncompliance with permit requirements shall be the responsibility of the Contractor.

1.5 HEALTH AND SAFETY

- A. The Contractor shall comply with all applicable Federal, State, and local health, safety, and environmental standards, regulations, rules or guidelines. Contractor health and safety requirements shall conform to 29 Code of Federal Regulations (CFR) 1910, 29 CFR 1926, and other applicable regulations.
- B. The Contractor shall perform excavation and other earthwork activities, if any, in accordance with their health and safety plan and additional requirements specified in Section 01 35 13 – Special Project Procedures and Section 31 20 00 – Earthwork.

1.6 QUALITY CONTROL

- A. The Contractor shall perform sufficient inspections, tests, and similar quality control services for all items of Work, on a continuing basis, including that of Subcontractors, to ensure conformance to applicable Technical Specifications and Drawings with respect to the quality of materials, workmanship, construction, and functional performance.

PART 2 – PRODUCTS

2.1 EQUIPMENT

- A. The Contractor shall provide, power, operate, control, and maintain all equipment necessary for the performance of the Work. Equipment shall be operated and maintained in accordance with manufacturer's recommendations and requirements.
- B. The Contractor shall provide all necessary equipment for decontamination Work including, but not limited to potable pressure washer units(s), all hosing and fittings necessary to connect pressure washer unit(s) to the water supply source, or other equipment necessary to remove caked or hardened material.

2.2 TRAILERS

- A. The Contractor's trailer(s) shall be of size and content for the adequate administration of the Contract, storage of necessary materials and equipment, and provision for personnel shelter.

2.3 MATERIALS

- A. The Contractor shall provide all necessary materials to perform the Work. Materials shall be delivered to the Jobsite; handled, stored, and protected; and utilized as specified by manufacturer's recommendations and requirements.
- B. The Contractor shall provide new 10-mil (minimum thickness), nylon-reinforced, polyethylene sheeting during stockpiling and covering. Sheeting shall be made of materials compatible with the type of waste(s) being managed.
- C. The Contractor shall provide all necessary materials for decontamination Work including, but not limited to decontamination pad or pads, all scrub brushes, or other materials necessary to remove caked or hardened material.

2.4 SAFETY AND SIGNAGE

- A. The Contractor shall provide all materials, equipment, personal protective equipment, facilities, and personnel required to perform the Work in accordance with Federal, State, and local health and safety rules and regulations.
- B. Signage required for safety of workmen shall be furnished in full compliance with specific safety requirements of Federal, State, and local agencies, including Illinois Occupational Safety and Health Administration (OSHA).

PART 3 – EXECUTION

3.1 EXISTING CONDITIONS

- A. The Contractor shall evaluate existing conditions in areas of Work as specified in Section 02 00 00 – Existing Conditions to identify, evaluate, control, and mitigate hazards present or that may be encountered during the Work.
- B. Jobsite preparation activities shall be performed in accordance with Section 01 71 00 – Jobsite Preparation.

3.2 TRAILERS

- A. If the Contractor requests to place a trailer(s) at the Jobsite trailers shall be staged within the Jobsite boundary as shown in the Drawings. The Contractor will be responsible for connecting utilities to the trailer(s). The Contractor shall provide such other temporary buildings as required for the use of workers and safe storage for tools and materials as Work progresses.
- B. Trailers must present a clean and neat exterior appearance and be in a state of good condition. Trailers which, in the opinion of the Owner, require exterior painting or maintenance shall not be allowed at the Jobsite.
- C. Trailers shall be anchored to resist high winds and must meet applicable Federal, State, local laws, ordinances, codes, rules and regulations and Owner requirements for anchoring mobile trailers.

3.3 SAFETY AND SIGNAGE

- A. Immediately upon beginning of Work, the Contractor shall provide a weatherproof glass-covered bulletin board not less than 36 inches by 48 inches in size for displaying the Equal Employment Opportunity poster, a copy of the wage decision, Wage Rate information poster, and other information requested by the Owner. The bulletin board shall be located at the Jobsite in a location easily accessible to all employees.
- B. The Contractor shall provide and maintain safety equipment required for personal safety of workmen, including fire protection, in full compliance with specific safety requirements of Federal, State, and local agencies, including Illinois OSHA.
- C. The Contractor shall install and maintain signage as necessary for the protection of workers and visitors as required by Federal, State, and local agencies, including Illinois OSHA.

3.4 ADVERSE WEATHER

- A. The Contractor shall maintain good housekeeping practices to minimize the level of effort needed for adverse weather readiness. The Contractor shall maintain the Jobsite including storage areas, free of accumulation of debris. Scrap lumber and general waste material and

rubbish shall be collected and stored in containers for removal and disposal at the close of each workday.

- B. The Contractor shall take necessary precautions to minimize danger to personnel and protect the Work in the event of adverse weather. Precautions must include, but are not limited to, closing openings; removing loose materials, tools and equipment from exposed locations; and removing or securing scaffolding and other temporary Work.

3.5 CONTAINMENT AREAS

A. Storage

1. The Contractor shall store all removed regulated materials, recyclable materials, and contaminated materials generated by the Work in US Department of Transportation-approved containers. The Contractor shall propose, and the Owner shall approve the location of all areas to be used for the storage of materials within the Contractor's area including removed regulated materials, demolition debris, recyclable materials, contaminated materials, and imported fill. Materials from different sources shall be managed separately.
2. Stockpiling of materials, if necessary, shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.
3. Equipment and materials to be used to complete the Work shall be stored in a laydown area proposed by the Contractor and approved by the Owner.

3.6 MACHINERY AND EQUIPMENT FUELING

- A. Onsite storage of fuel for Contractor machinery and equipment shall be approved by the Owner. If approved, the Contractor shall perform refueling operations in accordance with National Fire Protection Association (NFPA) 30A *Code for Motor Fueling Dispensing Facilities and Repair Garages*, 2012 edition, as amended, and all other applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.
- B. Per Illinois State Fire Marshal Division requirements, above ground storage tanks used to store flammable liquids may require a permit from the Office of the Illinois State Fire Marshal. The local fire department may also require a permit for tank use. The Contractor will be responsible for preparing and paying for necessary plan(s), registration(s), and permit(s).
- C. If the Contractor intends to have an aggregate above ground fuel storage capacity greater than 1,320 gallons, the Contractor shall prepare a Spill Prevention, Control, and Countermeasure (SPCC) plan for Owner review. The plan shall be maintained while fuel is stored at the Jobsite and closed when the fuel tank(s) is demobilized from the Jobsite.
- D. Fuel storage tanks shall be above ground and double walled, with locking fuel dispenser(s).

- E. An attendant is required to be present during all fueling operations. Under no circumstances should fueling be conducted without supervision.

END OF SECTION

SECTION 01 54 00 – CONSTRUCTION AIDS

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. The Contractor shall furnish, install, and maintain as long as necessary and remove when no longer required, safe and adequate scaffolding, ladders, staging, platforms, railings, hoisting equipment, etc., as required for proper execution of the Work.
- B. All construction aids shall conform to Federal, State, local laws, ordinances, codes, rules and regulations for protection of workers and the public.

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
 - 1. Section 01 33 00 – Submittal Procedures
 - 2. Section 01 35 13 – Special Project Procedures
 - 3. Section 01 41 00 – Regulatory Requirements
 - 4. Section 01 71 00 – Jobsite Preparation
- B. Work outlined in this Section shall be performed in accordance with all applicable Federal, State local laws, ordinances, codes, rules and regulations. References to regulatory requirements are included in Section 01 41 00 – Regulatory Requirements. The Contractor shall comply with all authorities having jurisdiction over the Work.

1.3 SUBMITTALS

- A. Use of construction aids shall be outlined in appropriate Work plans specified in Section 01 35 13 – Special Project Procedures.
- B. Submittals shall be provided as required in Section 01 33 00 – Submittal Procedures.

1.4 HEALTH AND SAFETY

- A. The Contractor shall comply with all applicable Federal, State, and local health, safety, and environmental standards, regulations, rules or guidelines. Contractor health and safety requirements shall conform to 29 Code of Federal Regulations (CFR) 1910, 29 CFR 1926, and other applicable regulations.

1.5 QUALITY CONTROL

- A. The Contractor shall perform sufficient inspections, tests, and similar quality control services for all items of Work, on a continuing basis, including that of Subcontractors, to ensure conformance to applicable Drawings and Specifications with respect to the quality of materials, workmanship, construction, and functional performance.

PART 2 – PRODUCTS

2.1 EQUIPMENT

- A. The Contractor shall provide, power, operate, control, and maintain all equipment necessary for the performance of the Work. Equipment shall be operated and maintained in accordance with manufacturer's recommendations and requirements.

2.2 MATERIALS

- A. The Contractor shall provide all necessary materials to perform the Work. Materials shall be delivered to the Jobsite; handled, stored, and protected; and utilized as specified by manufacturer's recommendations and requirements.
- B. Construction aids shall be in good working order and rated for greater than the maximum weight it is expected to hold, including personnel, tools, and equipment.

PART 3 – EXECUTION

3.1 GENERAL REQUIREMENTS

- A. Construction aids shall be under the supervision of a competent person as required by Occupational Safety and Health Administration (OSHA) during installation / setup and throughout use until removed. Inspections shall be documented by the Contractor and be available for review by the Owner. Any aid found to be in unsatisfactory condition shall be taken immediately out of service until fixed, if allowed, or replaced.
- B. Ladders and other aids used by personnel shall be secured as required by OSHA.
- C. Aerial lifts shall be used in accordance with manufacturer specifications and procedures. Only trained personnel shall operate an aerial lift and all workers entering the lift will wear and operate proper fall protection procedures in accordance with 29 CFR 1926.500.
- D. Scaffolding Systems
 - 1. Engineered scaffolding plans by a licensed scaffolding Subcontractor, and signed by an Illinois-licensed Professional Engineer, shall be provided for scaffolding when required per 29 CFR 1926. Scaffolding designs, including layout, weight limitations, and protections shall be submitted to the Owner in appropriate Work plans specified in Section 01 35 13 – Special Project Procedures.

2. Scaffolding must be cleaned with no visible debris prior to bringing scaffolding onsite and completely free of debris during and after installation.
3. The Contractor shall follow all manufacturer recommendations and all applicable regulations in the set-up, use and teardown of all scaffolding used.
4. The Contractor's designated competent person shall be onsite during all scaffolding set-up, use, and teardown. Each scaffolding system used shall be inspected by the Contractor's competent person at the beginning of each workday and prior to use. Inspections shall be documented on visible tags secured to each scaffolding entry point. The inspection tag documentation will at a minimum include the competent person's initials, date of inspection, and inspection conclusion.

E. Cranes

1. If required for the Work, cranes shall be operated by a licensed person.
2. Planned Work shall be submitted to the Owner in appropriate Work plans specified in Section 01 35 13 – Special Project Procedures.
3. Cranes must be clean with no visible debris prior to bringing the crane onsite and while in use.
4. The Contractor shall follow all manufacturer recommendations and all applicable regulations in the set-up, use and teardown of all cranes used.
5. Each crane shall be inspected by the Contractor's competent and licensed person at the beginning of each workday and prior to use. Inspections shall be documented and provided to the Owner prior to the crane's use. The inspection documentation will at a minimum include the competent person's initials, date of inspection, list of points inspected and inspection conclusion.
6. It is the responsibility of the Contractor to investigate and make all necessary improvements (i.e., stabilize) Work areas intended for crane use. Subsurface investigations, if any, shall be performed as specified in Section 01 71 00 – Jobsite Preparation.

END OF SECTION

SECTION 01 56 00 – BARRIERS AND ENCLOSURES

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. During the performance of Work, the Contractor shall furnish, install, and maintain as long as necessary and remove when no longer required adequate temporary barricades, barriers, warning signs or lights at all points throughout the Work for protection of properties, workers and the public.
- B. All barriers and enclosures shall conform to Federal, State, local laws, ordinances, codes, rules and regulations applicable for protection of workers and the public.

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
 - 1. Section 01 33 00 – Submittal Procedures
 - 2. Section 01 35 13 – Special Project Procedures
 - 3. Section 01 41 00 – Regulatory Requirements
 - 4. Section 02 00 00 – Existing Conditions
 - 5. Section 02 41 00 – Demolition
 - 6. Section 02 82 00 – Asbestos Abatement
 - 7. Section 02 83 00 – Lead Control and Removal
- B. Work outlined in this Section shall be performed in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. References to regulatory requirements are included in Section 01 41 00 – Regulatory Requirements. The Contractor shall comply with all authorities having jurisdiction over the Work.

1.3 SUBMITTALS

- A. Use of barriers and enclosures shall be outlined in appropriate Work plans specified in Section 01 35 13 – Special Project Procedures.
- B. Submittals shall be provided as required in Section 01 33 00 – Submittal Procedures.

1.4 HEALTH AND SAFETY

- A. The Contractor shall comply with all applicable Federal, State, and local health, safety, and environmental standards, regulations, rules or guidelines. Contractor health and safety requirements shall conform to 29 Code of Federal Regulations (CFR) 1910, 29 CFR 1926, and other applicable regulations.

1.5 QUALITY CONTROL

- A. The Contractor shall perform sufficient inspections, tests, and similar quality control services for all items of Work, on a continuing basis, including that of Subcontractors, to ensure conformance to applicable Drawings and Specifications with respect to the quality of materials, workmanship, construction, and functional performance.

PART 2 – PRODUCTS

2.1 EQUIPMENT

- A. The Contractor shall provide, power, operate, control, and maintain all equipment necessary for the performance of the Work. Equipment shall be operated and maintained in accordance with manufacturer's recommendations and requirements.

2.2 MATERIALS

- A. The Contractor shall provide all necessary materials to perform the Work. Materials shall be delivered to the Jobsite; handled, stored, and protected; and utilized as specified by manufacturer's recommendations and requirements.
- B. Where barrier tape can be used to adequately safeguard from hazards, tape shall be identified as follows:
 - 1. Yellow tape (may have black in it). Used for low hazard areas where access should be monitored and controlled. Wording such as "Use Caution When Crossing" shall be used.
 - 2. Red tape (may have black in it). Used for hazard areas where access is prohibited. Wording such as "Do Not Cross" shall be used.
 - 3. A tag shall be affixed on barrier tape providing name of Contractor, name of responsible person, and phone number.

2.3 SAFETY AND SIGNAGE

- A. The Contractor shall provide all materials, equipment, personal protective equipment, facilities, and personnel required to perform the Work in accordance with Federal, State, and local health and safety rules and regulations applicable to the Work.

PART 3 – EXECUTION

3.1 GENERAL REQUIREMENTS

- A. The Work area is to be restricted only to authorized, trained and protected personnel. These may include the Contractor's employees; employees of Subcontractors; Owner; Federal, State and local inspectors and other authorized or designated individuals. A list of authorized personnel shall be established by the Contractor prior to job start and posted as directed by these Technical Specifications. With the exception of emergency response personnel, the Contractor shall approve visitors before they enter the Work area(s).

- B. Enclosures for asbestos abatement, lead, and demolition Work are outlined in Section 02 82 00 – Asbestos Abatement, Section 02 83 00 – Lead Control and Removal, and Section 02 41 00 – Demolition, respectively.

3.2 TEMPORARY BARRIER

A. Jobsite Boundary

1. The Contractor shall install temporary fencing surrounding the Jobsite to prevent unauthorized personnel from entering the Jobsite. Fencing shall be rigid chain link fence, a minimum of six feet in height, with privacy fabric.
2. The fencing boundary shall include the sidewalk along West Krause Avenue adjacent to the Jobsite. Sidewalk closure shall be coordinated with the Owner.
3. Signage such as “DO NOT ENTER WORK ZONE” or similar shall be placed along installed fencing.

B. Within the Jobsite Boundary

1. The Contractor shall erect and maintain temporary barricades / barriers to prevent access to hazardous Work areas, such as areas where excavations, abatement, and crane Work (if necessary) is being performed.
2. For areas where a fall safety hazard will exist, the Contractor shall install temporary barricades / barriers as follows:
 - a. Placed far enough back from the hazard to allow for adequate warning and protection from the hazard
 - b. Sufficiently illuminated to provide visual warning
 - c. Adequately labeled to provide personnel warning of hazards
 - d. In place during both day and night
 - e. Maintained until the hazard is no longer present
 - f. Adequately secured to withstand adverse weather conditions, construction traffic, and meet the requirements outlined in Occupational Safety and Health Administration standards

C. Protection of Features

1. The Contractor shall provide additional temporary barriers at the Jobsite boundary and within or exterior to the Jobsite boundary as necessary to prevent damage to existing structures and features designated to remain as specified in Section 02 00 00 – Existing Conditions. Any temporary barriers exterior of the Jobsite boundary shall be coordinated with the Owner.

D. Traffic Control

1. If temporary traffic control is required exterior of the Jobsite, for activities such as hauling, the Work shall be coordinated with the Owner in advance. The Contractor is responsible for placing traffic control measures along roadways as necessary during the Work. Roadway closures shall be as minimal in duration to the extent possible.
2. When traffic controls are necessary, the Contractor shall furnish, install, and maintain traffic signs, barricades, warning lights, and all necessary equipment for the protection of the traveling public for any necessary offsite controls. Control measures shall include, but not be limited to, the following:
 - a. Roadways
 - i. Barricades with appropriate signage and flashing lighting
 - ii. Manned flagger ensuring the barricade is not circumvented
3. Offsite traffic controls, when required, shall be as specified and required by the US Federal Highway Administration and local codes.

END OF SECTION

SECTION 01 56 16 – DUST AND ODOR CONTROLS

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. The Contractor shall execute the Work by methods that minimize the generation of fugitive dust and odor. The Contractor shall provide and implement robust fugitive dust and odor control measures as necessary to limit the generation of fugitive dust and odor during the performance of the Work and prevent the migration of fugitive dust and odor to the boundary of the Jobsite. Measures include, but are not limited to, the following:
1. Wetting surrounding ground surfaces, including soil and roadways
 2. Operating multiple misting / water cannons during demolition
 3. Misting during loading of materials into haul trucks or roll-off containers
 4. Covering existing stockpiles when stockpiling is not being performed
 5. Cleaning / sweeping of roadways in and near the Jobsite
- B. The Contractor shall provide and implement dust control measures as specified in the Contractor prepared fugitive dust and odor control plan. The Contractor shall apply additional dust suppression at the Owner's request when specified control measures are inadequate. The Contractor assumes responsibility for any delays in Work due to inadequate dust and odor control measures and costs for providing additional measures necessary to meet requirements. Only water shall be used for dust control unless otherwise approved by the Owner.
- C. The Contractor is required to prevent fugitive dust, dirt, and mud from collecting on adjacent roadways. The Contractor is required to clean these adjacent roadways as needed or directed by the Owner. The Contractor shall remove dust, dirt, and mud from trucks as necessary to prevent tracking materials offsite.
- D. The Contractor shall monitor fugitive dust and odor as required by Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.
- E. This Section applies to general dust and odor that may be migrating away from areas of Work.

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
1. Section 01 32 00 – Project Controls Requirements
 2. Section 01 33 00 – Submittal Procedures
 3. Section 01 35 13 – Special Project Procedures
 4. Section 01 41 00 – Regulatory Requirements
 5. Section 01 52 00 – Construction Facilities

6. Section 01 74 00 – Cleaning and Waste Management
7. Section 02 41 00 – Demolition
8. Section 02 82 00 – Asbestos Abatement
9. Section 02 83 00 – Lead Control and Removal
10. Section 02 84 00 – PCB-Containing Material Removal
11. Section 02 87 00 – Nonhazardous and Hazardous Waste Removal
12. Section 02 88 00 – Universal Waste Removal

- B. Work outlined in this Section shall be performed in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. References to regulatory requirements are included in Section 01 41 00 – Regulatory Requirements. The Contractor shall comply with all authorities having jurisdiction over the Work.

1.3 SUBMITTALS

- A. Work to be performed as part of dust and odor control shall be outlined in appropriate Work plans specified in Section 01 35 13 – Special Project Procedures.
- B. Work performed during dust and odor control activities shall be summarized in the weekly progress report, as specified in Section 01 32 00 – Project Controls Requirements.
- C. Particulate monitoring log.
- D. Submittals shall be provided as required in Section 01 33 00 – Submittal Procedures.

PART 2 – PRODUCTS

2.1 EQUIPMENT

- A. The Contractor shall provide, power, operate, control, and maintain all equipment necessary for the performance of the Work. Equipment shall be operated and maintained in accordance with manufacturer's recommendations and requirements.
- B. Equipment for dust control shall include appropriate measures (e.g., heat tape, heaters) to prevent freezing or impair operation due to temperatures below freezing.
- C. Equipment for monitoring shall be able to operate continuously during working hours and in temperatures below freezing.

2.2 MATERIALS

- A. The Contractor shall provide all necessary materials to perform the Work. Materials shall be delivered to the Jobsite; handled, stored, and protected; and utilized as specified by manufacturer's recommendations and requirements.
- B. Chemical additives or other dust suppression chemicals shall not be used unless approved by the Owner prior to use.

PART 3 – EXECUTION

3.1 USE OF WATER FOR DUST CONTROL

- A. The Contractor shall provide, setup, and operate dust suppression equipment as needed to control dust migration. It is the responsibility of the Contractor to mobilize additional dust suppression equipment as needed based on the Work being performed and weather conditions.
- B. The Contractor is responsible for supplying hoses and all other necessary equipment to connect dust suppression equipment to the city water supply.
- C. Water shall be applied until surfaces, such as roadways, materials, or building structures during Work, are wet but avoiding the creation of run-off, ponding of water, or muddy or slippery conditions.

3.2 HANDLING OF MATERIALS

- A. Materials loaded into hauling trucks or roll-off containers shall be handled in a manner that limits the generation of visible dust or emanation of odor.
- B. When water is used for dust control during loading of hauling trucks or roll-off containers, use will be limited to prevent free liquids from exiting truck beds and containers during transportation. Once loaded, truck beds and roll-off containers shall be covered as necessary to control dust emissions during transport.
- C. Temporary cover, such as imported fill, or other pre-approved methods shall be used as necessary to control emanation of odors. Odors shall not be detected, based on olfactory observations, at the property boundary.
- D. Haul trucks and equipment shall be cleaned (decontaminated) as necessary to prevent material (dust, dirt and mud) from accumulating on adjacent roadways. The Jobsite is located within a City of Peoria neighborhood and track-out of materials onto public access sidewalks and roadways is strictly prohibited. The Contractor is required to clean these surfaces as directed by the Owner as part of the Work.

3.3 MANAGEMENT OF STOCKPILES

- A. Stockpiles shall be maintained in a manner that prevents wind-blown dust generation and covered with weighted polyethylene sheeting when not in use.
- B. Requirements for management of stockpiles are specified in Section 01 74 00 – Cleaning and Waste Management.

3.4 AIR MONITORING

- A. The Contractor shall monitor for dust particulates during the performance of the demolition and ground intrusive Work.

- B. The Contractor shall perform dust particulate monitoring as follows:
 - 1. The Contractor shall setup and maintain five real-time monitoring devices at the Jobsite boundary. One device shall be placed upwind of the Work, two devices side-gradient of the Work, and two devices placed downwind of Work. The location of upwind, side-gradient, and downwind monitors will be established each day based on observed prevailing wind conditions. The locations of monitors may require changing from initial setup locations if there is a 90 degree or more change in the prevailing wind direction averaged over a 30-minute period during the workday. Dust monitoring will not be performed during inclement weather.
 - 2. Dust particulate monitors will monitor for respirable particles 10 microns or less in diameter (PM10).
 - 3. Data collected by dust particulate monitors will be evaluated on a 60-minute and 120-minute average to determine when additional dust control measures must be implemented (Take Action) and / or work must cease (Stop Work). Additional dust control measures shall be implemented if sustained particulate levels exceed 150 micrograms per cubic meter ($\mu\text{g} / \text{m}^3$) over a 60-minute period. Work shall cease if additional dust control measures do not prevent sustained particulate levels exceeding $150 \mu\text{g} / \text{m}^3$ over a 120-minute period. During the work stoppage period (minimum of 15 minutes), the Contractor shall re-evaluate the Work and make adjustments to dust control measures and / or the rate / speed of and / or quantity of equipment used for demolition Work. After the adjustments have been made and the Work is resumed, particulate readings will be observed for a 60-minute period to ensure the adjustments are effective.
 - 4. The Contractor shall maintain a particulate monitoring log on a daily basis noting the following:
 - a. Day of monitoring
 - b. General wind direction and speed for the day
 - c. Location of each upgradient and downgradient monitors
 - d. Highest reading recorded for the day and by which monitor(s)
 - e. Actions taken by the Contractor to mitigate elevated dust readings, if encountered
 - 5. Data collected by dust particulate monitors will be downloaded from units on a daily basis, reviewed by the Contractor's construction manager, and submitted with the weekly progress report. The particulate monitoring log shall also be submitted weekly.

- C. Monitoring of dust, odor, and chemical exposure (volatile organics, flammable conditions, lead, asbestos, etc.) to personnel in the vicinity of the Work or other monitoring requested by the Owner is specified in the following Sections:
 - 1. Section 02 41 00 – Demolition
 - 2. Section 02 61 00 – Excavation, Removal and Handling of Contaminated Material

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3. Section 02 82 00 – Asbestos Abatement
4. Section 02 83 00 – Lead Control and Removal
5. Section 02 84 00 – PCB-Containing Material Removal
6. Section 02 87 00 – Nonhazardous and Hazardous Waste Removal
7. Section 02 88 00 – Universal Waste Removal

END OF SECTION

SECTION 01 57 13 – TEMPORARY EROSION AND SEDIMENT CONTROLS

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. The Contractor shall provide all labor, equipment, and materials necessary for the installation, inspection, and maintenance of temporary and permanent erosion and sediment controls that are performed or constructed and maintained to retain sediment onsite by capturing, containing, retarding, and / or filtering storm runoff and preventing migration of sediments to surface waters. Structural and non-structural control measures shall include temporary berms, diversion, or other barriers including, stone, silt fences, inspections, procedures, good housekeeping methods, or other agreed to actions or materials as required by regulatory requirements, including but not limited to:
1. City of Peoria erosion and stormwater permit
 2. Illinois Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System Permit for Construction Notice of Intent
 3. Illinois Department of Transportation (DOT) *Erosion and Sediment Control Field Guide for Construction Inspection*
 4. *Illinois Urban Manual*
- B. The Contractor shall obtain all necessary permits for Work to be performed at the Jobsite.
- C. Erosion and sediment control measures shall be performed and or installed prior to any construction activities or earth disturbances. Additional structural or non-structural erosion and sedimentation control measures shall be put into place, performed or installed and maintained as necessary during construction activities, such as surrounding newly created stockpile areas or providing good housekeeping in areas that are found warranted.
- D. During the performance of the Work, control measures shall be maintained, and land disturbance shall be kept to a minimum. Control measures that are ineffective shall be repaired or replaced with more robust or effective measures as needed. Conducting the Work in accordance with the control measures shown on the Drawings does not relieve the Subcontractor of responsibility for completing the Work in a manner that minimizes erosion when field conditions occur that require additional measures.
- E. The Contractor shall inspect or hire a qualified inspector to inspect erosion and sediment controls every seven days, or within 24 hours of a rain event of 0.5 inches or greater, as required by Illinois EPA, State of Illinois law, and / or the City of Peoria erosion and stormwater permit until permits are discontinued by the City of Peoria and Illinois EPA. Documentation of inspections or logs shall be maintained with the Storm Water Pollution Prevention Plan (SWPPP) or storm water management plan, as applicable, and submitted with the weekly progress report.

- F. At the completion of the Work, the Contractor shall provide all labor, equipment, and materials necessary for the removal, transportation, and disposal of temporary erosion and sediment control measures not specified to remain. Remove, transport, and dispose of sediment resulting from erosion control measures in a manner consistent with overall intent of this Section and which does not result in additional erosion.

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
1. Section 01 32 00 – Project Controls Requirements
 2. Section 01 33 00 – Submittal Procedures
 3. Section 01 35 13 – Special Project Procedures
 4. Section 01 41 00 – Regulatory Requirements
 5. Section 01 52 00 – Construction Facilities
 6. Section 02 00 00 – Existing Conditions
 7. Section 02 41 00 – Demolition
 8. Section 31 20 00 – Earthwork
 9. Section 32 92 19 – Seeding
- B. The publications listed below form a part of this Section to the extent referenced. The most recent issue of each publication shall apply, unless otherwise noted. The publications are referred to in the text by the basic designation only.
1. *Illinois Department of Transportation Erosion and Sediment Control Field Guide for Construction Inspection*, as updated, provides a guide for reducing erosion and preventing sediment from leaving construction sites
 2. Illinois DOT, 2015, Standard Specifications for Road and Bridge Construction
 3. *Illinois Urban Manual*
 4. ASTM International (ASTM) standards
 5. U.S. Department of Agriculture Soil Conservation Service Publication dated July 1975, Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas
 6. U.S. Environmental Protection Agency (USEPA) Publication 430/9-73-007 Processes, Procedures and Methods to Control Pollution Resulting from All Construction Activity
- C. Work outlined in this Section shall be performed in accordance with all applicable Federal, State, local laws, ordinances, codes, rules, regulations, and permits applicable to the Work. References to regulatory requirements are included in Section 01 41 00 – Regulatory Requirements. The Contractor shall comply with all authorities having jurisdiction over the Work.

1.3 SUBMITTALS

- A. Work to be performed as part of temporary erosion and sediment controls, including product information for materials including geotextiles, wattles, bales, mulch, stakes, etc., shall be outlined in appropriate Work plans specified in Section 01 35 13 – Special Project Procedures.
- B. Permits shall be submitted as specified in Section 01 35 13 – Special Project Procedures.
- C. Work performed during temporary erosion and sediment control activities shall be summarized in the weekly progress report, as specified in Section 01 32 00 – Project Controls Requirements, and in the construction summary report, as specified in Section 01 35 13 – Special Project Procedures.
- D. Completed inspection forms shall be included in the weekly progress report, as specified in Section 01 32 00 – Project Controls Requirements.
- E. Submittals shall be provided as required in Section 01 33 00 – Submittal Procedures.

1.4 PERMITS, LICENSES, CERTIFICATIONS

- A. The Contractor is responsible for obtaining all necessary permits for the Work, from the City of Peoria, Illinois EPA, or other necessary County, State, and Federal agencies. The Contractor shall submit draft versions of Contractor-prepared permits and notifications to the Owner prior to submission to the appropriate agency.
- B. The Contractor shall comply with permit requirements. Any fines levied for noncompliance with permit requirements shall be the responsibility of the Contractor.
- C. The Contractor shall provide a competent person, who is experienced to complete inspections as required by all State and local permits.

1.5 QUALITY CONTROL

- A. Contractor shall maintain the temporary and permanent vegetation, erosion and sediment control measures, and other protective measures in good and effective operating condition by performing routine inspections to determine condition and effectiveness, by restoration of destroyed vegetative cover, and by repair of erosion and sediment control measures and other protective measures.

PART 2 – PRODUCTS

2.1 EQUIPMENT

- A. The Contractor shall provide, power, operate, control, and maintain all equipment necessary for the performance of the Work. Equipment shall be operated and maintained in accordance with manufacturer's recommendations and requirements.

2.2 MATERIALS

- A. All soil erosion and sediment control materials shall be as specified in the SWPPP, permits, or the Illinois Urban Design Manual.

PART 3 – EXECUTION

3.1 GENERAL

- A. The Contractor shall be responsible for installing, inspecting, and maintaining proper erosion, sediment, and turbidity control measures throughout the performance of the Work. The Contractor shall provide additional measures as field conditions and / or regulatory agencies required. If a conflict exists between these procedures and the regulatory requirements, the Contractor shall comply with the more restrictive requirements.
- B. Earthwork
 1. Soil erosion and sediment control measures shall be installed prior to any construction or earth disturbances and shall be continuously maintained.
 2. Earthwork activities shall be performed in a manner to minimize the duration of exposure of disturbed soils. Side slopes and back slopes shall be protected upon completion of rough grading.
 3. Storm water runoff shall be diverted around disturbed areas via berms, channels, sumps, or other temporary diversion and protection works.
 4. Stockpiles shall be temporarily covered with new 10-mil (minimum thickness), nylon-reinforced, polyethylene sheeting when not in use. A sediment control barrier shall be installed surrounding any stockpile.
 5. The Contractor shall install and maintain stabilized construction entrance(s) at ingress / egress points. The entrance(s) shall be maintained in a condition that shall prevent tracking of sediment onto roadways, adjacent property or public rights-of-way. Any sediment tracked offsite shall be removed by the Contractor to the satisfaction of the Owner.
 6. Accumulated sediment shall be removed from all collection points, including along all lengths of silt fence, fabric drops, etc., and properly disposed offsite in accordance with Owner's requirements.

3.2 SILT FENCE

- A. Silt fence shall be installed along the downhill perimeter edge of all disturbed areas, perpendicular to anticipated storm water sheet flow where possible.
- B. Silt fence shall be entrenched a minimum of twelve inches into the ground and extend a minimum of 16 inches above ground surface. The silt fence trench shall be backfilled and compacted.

- C. Filter fabric shall be from a continuous roll cut to the length of the barrier to avoid use of joints. When joints are unavoidable, splice together filter fabric at a support post, with a minimum of six inches of overlap, or overlap posts as recommended by the manufacturer.
- D. Steel "T" fence posts or wood stakes shall be used to support the full height of the silt fence. The stakes shall have a minimum nominal dimension of 1-1/4 inch by 1-1/4 inch and shall be air- or kiln-dried hardwood. Posts / stakes shall be driven to a minimum depth of 28 inches and shall be spaced not more than eight feet apart.
- E. Silt fences shall be repaired or replaced immediately if fencing is torn, sagging, overtopped, blown over, or is not functioning as intended.
- F. Silt fences require clean-out when capacity has been reduced by 50 percent or more.
- G. The Contractor shall use augmented silt fence in critical areas.
- H. When plastic net reinforcing is used, ensure the minimum average grab strength requirement for fabric, before and after accelerated weathering, is 100 pounds and 35 pounds, respectively.
- I. Silt fence spacing shall follow the guideline with approximate spacing below. Spacings should be decreased for highly erodible soils.

Slope	Approximate Spacing (feet)
Up to 10:1 (10%)	100
Up to 5:1 (20%)	60
Up to 4:1 (25%)	50
Up to 3:1 (33%)	40
Up to 2.5:1 (40%)	30

3.3 SEEDING

- A. Seeding shall be performed as specified in Section 32 92 19 – Seeding.

3.4 MULCH

- A. Mulch shall be placed to protect sides and back slopes as soon as rough grading is completed or sufficient soil is exposed to require erosion protection.
- B. Materials used shall be safe to the applicator and adjacent workers, and nontoxic to plants, fish, and other wildlife when properly applied according to USEPA and other regulatory agencies.

3.5 CLEAN UP AND PROTECTION

- A. Following acceptance of permanent seeding Work by the Owner and regulatory agency, the temporary soil erosion and sediment control measures shall be removed from the Jobsite.

END OF SECTION

SECTION 01 71 00 – JOBSITE PREPARATION

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. The Contractor shall provide all labor, equipment, materials, treatment, controls, and personal protective equipment (PPE) necessary to prepare the Jobsite for the Work.
- B. The Contractor shall provide additional security as deemed necessary by the Contractor for protection of the Work area.
- C. The Contractor shall perform utility locating in accordance with these Technical Specifications and the Contract Documents. Utility locating shall be performed prior to conducting ground intrusive activities to confirm underground utilities and structures located within the limits of Work, if any, are inactive. Utilities and other underground structures shown on the Drawings are shown diagrammatically and it is not to be inferred that the locations shown are precise, all existing utilities and underground structures are depicted, or utilities noted as "abandoned" or "removed" are in fact abandoned or removed.
- D. The Contractor shall setup and install temporary utilities, facilities, barriers and enclosures, construction aids, vehicular access and parking, fugitive dust and odor controls, and sediment and erosion controls as specified in the Technical Specifications.
- E. All Jobsite preparation Work shall be conducted in accordance with these Technical Specifications and all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
 - 1. Section 01 14 00 – Work Restrictions
 - 2. Section 01 32 00 – Project Controls Requirements
 - 3. Section 01 32 33 – Media Documentation
 - 4. Section 01 33 00 – Submittal Procedures
 - 5. Section 01 35 13 – Special Project Procedures
 - 6. Section 01 41 00 – Regulatory Requirements
 - 7. Section 01 51 00 – Temporary Utilities
 - 8. Section 01 52 00 – Construction Facilities
 - 9. Section 01 54 00 – Construction Aids
 - 10. Section 01 56 00 – Barriers and Enclosures
 - 11. Section 01 56 16 – Dust and Odor Controls
 - 12. Section 01 57 13 – Temporary Erosion and Sediment Controls
 - 13. Section 01 74 00 – Cleaning and Waste Management

14. Section 02 00 00 – Existing Conditions
 15. Section 02 41 00 – Demolition
 16. Section 31 20 00 – Earthwork
- B. Work outlined in this Section shall be performed in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. References to regulatory requirements are included in Section 01 41 00 – Regulatory Requirements. The Contractor shall comply with all authorities having jurisdiction over the Work.
- C. A collection of Jobsite Drawings is included in Appendix B to provide the Contractor details on the building, locations and details of utilities, and details on other features. Appendix B may not contain all pertinent details needed by the Contractor to perform the Work. It is the responsibility of the Contractor to request additional Drawings as necessary for the performance of the Work; however, due to the age of the school, additional Drawings may not be available. The Contractor shall have access to the Jobsite as requested by the Contractor. The Contractor shall have ultimate responsibility for locating all pertinent buildings, locations, details of utilities, and details of other features pertinent to the Work.

1.3 SUBMITTALS

- A. Work to be performed to prepare the Jobsite shall be outlined in appropriate Work plans specified in Section 01 35 13 – Special Project Procedures.
- B. Work performed during Jobsite preparation shall be summarized in the weekly progress report, as specified in Section 01 32 00 – Project Controls Requirements.
- C. Pre-Work conditions report, as specified in this Section.
- D. Utility locating documentation following American Society of Civil Engineers (ASCE) guidelines (CI / ASCE 38-02).
- E. Submittals shall be provided as required in Section 01 33 00 – Submittal Procedures.

1.4 PERMITS, LICENSES, CERTIFICATIONS

- A. The Contractor is responsible for obtaining necessary permits and complying with permit requirements. Any fines levied for noncompliance with permit requirements shall be the responsibility of the Contractor.

1.5 HEALTH AND SAFETY

- A. The Contractor shall comply with all applicable Federal, State, and local health, safety, and environmental standards, regulations, rules or guidelines. Contractor health and safety requirements shall conform to 29 Code of Federal Regulations (CFR) 1910, 29 CFR 1926, and other applicable regulations.

- B. The Contractor shall perform excavation and other earthwork activities in accordance with their health and safety plan and additional requirements specified in Section 01 35 13 – Special Project Procedures and Section 31 20 00 – Earthwork.

1.6 QUALITY CONTROL

- A. The Contractor shall perform sufficient inspections, tests, and similar quality control services for all items of Work, on a continuing basis, including that of Subcontractors, to ensure conformance to applicable Technical Specifications and Drawings with respect to the quality of materials, workmanship, construction, and functional performance.
- B. The Contractor shall perform excavation and other earthwork activities in accordance with their Work plans, such as demolition Work plan and additional requirements specified in Section 31 20 00 – Earthwork.

PART 2 – PRODUCTS

2.1 EQUIPMENT

- A. The Contractor shall provide, power, operate, control, and maintain all equipment necessary for the performance of the Work. Equipment shall be operated and maintained in accordance with manufacturer's recommendations and requirements.

2.2 MATERIALS

- A. The Contractor shall provide all necessary materials to perform the Work. Materials shall be delivered to the Jobsite; handled, stored, and protected; and utilized as specified by manufacturer's recommendations and requirements.
- B. All imported fill (general fill, aggregate, stone, etc.) for the construction and maintenance of Work areas shall be clean (free of contaminants). The Contractor shall provide certifications and / or perform chemical analysis as specified in Section 31 20 00 – Earthwork.

PART 3 – EXECUTION

3.1 EXISTING CONDITIONS

- A. The Contractor shall evaluate existing conditions in areas of Work as specified in Section 02 00 00 – Existing Conditions to identify, evaluate, control, and mitigate hazards present or that may be encountered during the Work.
- B. The Contractor shall document existing conditions prior to performance of Work.
 - 1. The Contractor shall establish a video-graphic record of Jobsite and surrounding area conditions prior to initiating work at the Jobsite. The record shall include the condition of, but not be limited to the following:
 - a. Existing driveways

- b. Sidewalks
 - c. Curbing
 - d. Fire hydrants
 - e. Wells (if present)
 - f. Utility structures / poles
 - g. Landscaping and ditches
 - h. Fencing
 - i. Nearby structures
 - j. Other features deemed appropriate by the Contractor and / or Owner
2. The intent of documenting existing conditions is to provide a basis of comparison in the event damage to existing features is observed. Documentation can be reviewed to determine if the damage was pre-existing.
 3. Videography shall be collected as specified in Section 01 32 33 – Media Documentation.
 4. A pre-Work conditions report shall be submitted to the Owner as specified in Section 01 35 13 – Special Project Procedures.
- C. Buildings and structures within the Jobsite are considered vacated. The Contractor shall verify each day that buildings and structures are vacant.
- D. Prior to commencing any ground intrusive Work, the Contractor shall perform utility locating as specified.
- E. The Contractor shall employ means necessary to avoid active utility contacts (e.g., electric, gas, water, sewer, etc.), including, but not limited to, hand digging or soft digging via air knife equipment to identify and expose active utilities in the vicinity of any ground intrusive Work. Should uncharted or incorrectly charted active utilities be encountered during ground intrusive Work, the Contractor shall immediately cease Work and consult with the Owner immediately for directions. The Work shall not commence until approval from the Owner has been granted to the Contractor. The Contractor shall repair any damaged utilities to the satisfaction of the utility owner.
- F. The Owner's existing utilities that are no longer in service and not designated to remain shall be removed as specified in Section 02 41 00 – Demolition. Should uncharted, or incorrectly charted, piping or utilities be encountered during ground intrusive Work that are not marked on the Drawings, the Contractor shall immediately cease Work and consult with the Owner to determine if the piping or utility can be abandoned or needs to be protected. The Work shall not commence until approval from the Owner has been granted to the Contractor.

3.2 SECURITY

- A. Security during the performance of the Work shall be setup and maintained as specified in Section 01 14 00 – Work Restrictions.

3.3 LAYDOWN AREAS AND HAUL ROUTES

- A. The Contractor shall setup and maintain laydown areas as follows:
 - 1. The Contractor is responsible for purchasing, delivery, placement, grading, and maintenance of materials, such as aggregate, necessary to stabilize and utilize laydown areas.
- B. Haul Routes
 - 1. The Contractor shall enter and exit the Jobsite only at designated locations.
 - 2. Driveways and entrances serving the property are to be clear and available to the Owner.
- C. Dust Control
 - 1. Dust control measures, such as wetting, shall be employed on haul roads and parking areas as necessary to prevent migration of dust. Dust control requirements are specified in Section 01 56 16 – Dust and Odor Control.
- D. Traffic Control
 - 1. During the performance of the Work, the Contractor shall maintain and protect traffic on all roads. Traffic control requirements are specified in Section 01 56 00 – Barriers and Enclosures.
 - 2. The Contractor's traffic on roads selected for hauling material to and from the Jobsite shall interfere as little as possible with public traffic. The Contractor shall investigate the adequacy of existing roads and the allowable load limit on these roads and shall be responsible for adhering to any such haul limits.
- E. Decontamination
 - 1. The Contractor shall provide the means to decontaminate any vehicles that have entered exclusion zones or have otherwise been contaminated at the point of vehicle egress, before traveling onto roadways exterior to exclusion zones. Decontamination procedures are specified in Section 01 74 00 – Cleaning and Waste Management.

3.4 UTILITY LOCATING

- A. The Contractor shall perform utility locating as specified in these Technical Specifications and in the Contract Documents. In the event of conflict in language between the Technical Specifications and Contract Documents, the Contractor shall adhere to the most stringent requirement.

- B. The Contractor shall contact 811 / JULIE One Call at least 72 hours prior to performing any ground intrusive activities. In response to positive responses from utilities, the Contractor shall contact utility owner to verify presence and approximate locations of lines. Copies of correspondence and information between the Contractor and utility owners shall be provided to the Owner. The Contractor shall submit to the Owner copies of 811 / JULIE One Call ticket numbers.
- C. The Contractor shall procure a third-party utility locating company to scan for utilities and obstructions in the vicinity of any ground intrusive Work. Scanning devices shall include ground penetrating radar, electromagnetic detector, and / or radiofrequency charges and detectors as necessary to locate utilities and / or obstructions in the vicinity of ground intrusive Work. Copies of documentation provided by the utility locating company shall be submitted to the Owner a minimum of two days prior to performing intrusive activities.
- D. The Contractor shall engage in additional means necessary to avoid active utility contacts, including, but not limited to, hand digging or air knife equipment to identify and expose active utilities in the vicinity of ground intrusive Work. Should uncharted, or incorrectly charted, piping or other utilities be encountered during ground intrusive Work, the Contractor shall consult with the Owner immediately for directions. The Owner shall provide authorization to re-commence Work. The Contractor shall repair any damaged utilities to the satisfaction of the utility owner.
- E. Utility locating documentation shall follow ASCE guidelines (CI / ASCE 38-02).

3.5 TEMPORARY UTILITIES

- A. The Contractor shall setup, install, and maintain temporary utilities as specified in Section 01 51 00 – Temporary Utilities.

3.6 CONSTRUCTION FACILITIES

- A. The Contractor shall setup, install, and maintain temporary facilities as specified in Section 01 52 00 – Construction Facilities.

3.7 CONSTRUCTION AIDS

- A. The Contractor shall setup, install, and maintain construction aids as specified Section 01 54 00 – Construction Aids.

3.8 BARRIERS AND ENCLOSURES

- A. The Contractor shall setup, install, and maintain barriers and enclosures as specified Section 01 56 00 – Barriers and Enclosures.

3.9 DUST AND ODOR CONTROLS

- A. The Contractor shall setup, install, and maintain fugitive dust and odor controls as specified in Section 01 56 16 – Dust and Odor Controls.

3.10 TEMPORARY EROSION AND SEDIMENT CONTROLS

- A. The Contractor shall setup, install, and maintain erosion and sediment controls as specified in Section 01 57 13 – Temporary Erosion and Sediment Controls.

END OF SECTION

SECTION 01 74 00 – CLEANING AND WASTE MANAGEMENT

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. The Contractor shall provide all labor, power, equipment, materials, and personal protective equipment (PPE) necessary to clean / decontaminate all Jobsite features as appropriate in order to disconnect, dismantle, remove, and properly handle, manage, store, transport, and dispose / recycle items in accordance with applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.
- B. It is the responsibility of the Contractor to perform inspections of the Work area to identify when equipment and building materials need to be cleaned or decontaminated to meet requirements necessary to properly dispose / recycle equipment and building materials in accordance with applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.
- C. Work associated with cleaning / decontamination includes, but is not limited to, the following:
 - 1. Identifying Jobsite features requiring cleaning / decontamination
 - 2. Furnishing, powering, operating, and maintaining all necessary equipment to perform cleaning / decontamination Work
 - 3. Installing and maintaining necessary controls to prevent releases of materials, wash water, asbestos fibers, oils, chemicals, and dust to the ground surface, storm and sanitary sewer systems, and adjacent properties
 - 4. Providing, operating, and maintaining necessary treatment systems such as tanks, oil / water separator, and filters to treat collected cleaning / decontamination liquids (e.g., wash water) for onsite discharge (to sanitary sewer system), if approved by the Owner and the Greater Peoria Sanitary District, or offsite transportation and disposal
 - 5. Performing sampling of waste streams, inspections, and reporting as necessary for final disposal of materials
- D. The Contractor shall manage, collect, store, transport, and dispose waste in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. Waste includes all building materials, equipment, debris, chemicals, and materials that cannot be recycled for monetary value. In general, this task includes temporary collection and storing of solid waste and liquid industrial by-products; waste characterization; management of materials onsite until waste characterization data is received; packaging, preparing, and loading of all waste; and transporting for or arrangements for proper disposal offsite. The final disposal destination must be approved by the Owner prior to removal of the waste from the Jobsite.

- E. The Contractor shall manage, collect, store, transport, and recycle all recyclable materials in accordance with all applicable Federal, State local laws, ordinances, codes, rules and regulations applicable to the Work. In general, this task includes recycle material determination; packaging, preparing, and loading all recyclable materials; and transporting for or arrangements for transport for proper recycling offsite. The final recycling destination must be approved by the Owner prior to removal of the recyclable material from the Jobsite.
- F. Any reuse of assessments, characterization data, Drawings, and / or other Jobsite information shall be at the Contractor's own risk and without legal liability on the Owner. The Contractor shall indemnify and hold the Owner harmless from all claims, damages, expenses, or costs resulting from the Contractor's interpretation of available information.

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
 - 1. Section 01 32 00 – Project Controls Requirements
 - 2. Section 01 33 00 – Submittal Procedures
 - 3. Section 01 35 13 – Special Project Procedures
 - 4. Section 01 41 00 – Regulatory Requirements
 - 5. Section 01 52 00 – Construction Facilities
 - 6. Section 01 56 16 – Dust and Odor Controls
 - 7. Section 02 00 00 – Existing Conditions
 - 8. Section 02 41 00 – Demolition
 - 9. Section 02 82 00 – Asbestos Abatement
 - 10. Section 02 83 00 – Lead Control and Removal
 - 11. Section 02 84 00 – PCB-Containing Material Removal
 - 12. Section 02 87 00 – Nonhazardous and Hazardous Waste Removal
 - 13. Section 02 88 00 – Universal Waste Removal
 - 14. Section 31 23 19 – Dewatering
- B. Work outlined in this Section shall be performed in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. References to regulatory requirements are included in Section 01 41 00 – Regulatory Requirements.

1.3 SUBMITTALS

- A. Work to be performed to clean / decontaminate Jobsite features and waste management shall be outlined in appropriate Work plans specified in Section 01 35 13 – Special Project Procedures.
- B. Work performed and progress during cleaning and waste management shall be summarized in the weekly progress report, as specified in Section 01 32 00 – Project Controls Requirements.

- C. Analytical data shall be provided as specified in Section 01 35 13 – Special Project Procedures.
- D. Water discharge log, for waters conveyed through the sanitary sewer.
- E. Waste inventory log updated weekly summarizing classification and quantities of wastes stored onsite, classification and quantities of wastes transported offsite for disposal, manifest numbers for waste shipped offsite, and quantity of ferrous and non-ferrous recyclable materials transported offsite for recycling.
- F. Approved waste profiles and special waste authorizations.
- G. Waste and recycling weight tickets from the disposal / recycling facility.
- H. Waste manifests (nonhazardous and uniform hazardous waste manifests), bills of lading, land disposal restriction forms, and other shipping records signed by the generator (Owner) or authorized designee, authorized transporter, and disposal / recycling facility. Waste documentation must have all required signatures.
- I. For universal waste, certificates of recycling from the recycling facility indicating accurate amount and type of universal waste recycled and date of processing, as applicable.
- J. Submittals shall be provided as required in Section 01 33 00 – Submittal Procedures.

1.4 QUALITY CONTROL

- A. The Contractor shall use an Owner-approved qualified independent third-party laboratory service to perform analytical testing as specified.

PART 2 – PRODUCTS

2.1 EQUIPMENT

- A. The Contractor shall provide, power, operate, control, and maintain all equipment necessary for the performance of the Work. Equipment shall be operated and maintained in accordance with manufacturer's recommendations and requirements.
- B. The Contractor shall provide, power, operate, control, and maintain all equipment necessary to perform cleaning / decontamination activities as necessary for the performance of the Work. Equipment includes, but is not limited to, pumps, controls, hoses, piping, connections, filtration devices such as bag filters, and cold weather protection such as heat trace.

2.2 HAUL TRUCKS

- A. The Contractor shall provide Owner-approved, US Department of Transportation (USDOT)-compliant transport vehicles in good condition, empty, and clean (decontaminated of formerly hauled materials) for wastes and recyclable materials.
- B. Over the road trucks shall be properly equipped for the Work and include beds with walls on all sides, dupe gates that close properly to form a tight seal, and tarps, screens, or netting to cover hauled materials.

2.3 VACUUM TRUCKS

- A. The Contractor shall provide vacuum trucks in good condition, empty, and clean (decontaminated of formerly stored materials).

2.4 MATERIALS

- A. The Contractor shall provide all necessary materials to perform the Work. Materials shall be delivered to the Jobsite; handled, stored, and protected; and utilized as specified by manufacturer's recommendations and requirements.
- B. The Contractor shall provide new 10-mil (minimum thickness), nylon-reinforced, polyethylene sheeting during stockpiling and covering. Sheeting shall be made of materials compatible with the type of waste(s) being managed.

2.5 CONTAINERS AND PACKAGING

- A. The Contractor shall provide USDOT-compliant containers in good condition, empty, and clean (decontaminated of formerly stored materials). Containers include drums, as required for small quantity containerization, or polyethylene tanks, frac tanks, and roll-off boxes for larger quantities of materials. Containers shall be made of materials compatible with the type of waste(s) being stored.

2.6 SAFETY AND SIGNAGE

- A. The Contractor shall provide and install safety signage as required by Occupational Safety and Health Administration (OSHA), US Environmental Protection Agency (USEPA), Illinois OSHA, and Illinois Environmental Protection Agency.
- B. The Contractor shall provide and install signage for storage areas, containers, and transportation vehicles as required by Federal, State, local laws, ordinances, codes, rules and regulations.

2.7 SPILL RESPONSE

- A. The Contractor shall provide appropriate spill response materials including, but not limited to the following: containers, absorbents, shovels, and PPE. Spill response materials shall be compatible with the type of materials and contaminants being handled.

PART 3 – EXECUTION

3.1 EXISTING CONDITIONS

- A. The Contractor shall evaluate existing conditions in areas of Work as specified in Section 02 00 00 – Existing Conditions to identify, evaluate, control, and mitigate hazards present or that may be encountered during the Work.
- B. It is the responsibility of the Contractor to perform inspections of the Work area to identify when equipment and building materials need to be cleaned or decontaminated to meet requirements necessary to properly dispose / recycle equipment and building materials in accordance with applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.

3.2 HEALTH AND SAFETY

- A. Training:
 - 1. The Contractor shall be responsible for assuring the following training has been completed prior to the commencement of Work:
 - a. Hazard communication and material handling for hazardous and universal wastes
 - b. Container labeling, collection, and storage for all wastes
 - c. Special training on equipment and procedures unique to the Jobsite shall be performed, as required, for those supervising and performing this Work
 - d. Training in emergency response procedures
- B. The Contractor shall limit access to the area of Work to authorized, trained, and protected personnel only. Authorized, trained, and protected personnel include workers who have completed and have up-to-date training applicable to the hazards of the Work and have appropriate PPE for health and safety hazards present in the area of Work.
- C. If the Contractor determines that confined space entry Work is necessary for the performance of the Work, the Contractor shall notify the Owner and all Work procedures and safety measures shall be discussed prior to performing the Work.
- D. The Contractor shall perform air monitoring to determine appropriate safety and personal protective measures to be implemented. Air monitoring parameters shall be based on contaminants of concern and may include organic vapors, metals, and flammable explosive conditions. Air monitoring shall be performed continuously to confirm hazardous and / or flammable vapors are not present in the area of Work.

3.3 SPILL RESPONSE

- A. Appropriate spill response materials shall be available at all times when materials / wastes are being collected, handled, stored, and transported.

- B. In the event of a spill / release, the Contractor is expected to immediately stop the source of the spill / release, contain it, clean up all materials, and notify the Owner immediately. The Contractor shall be responsible for cleaning up any spills / releases to the satisfaction of the Owner. If a spill creates or may create a hazardous condition (e.g., release to the storm drain), the Owner may contract an emergency response contractor at the Contractor's expense if the Contractor is not prepared to, or is not qualified to, immediately respond and clean up the spill.
- C. Spills, regardless of size / quantity, shall be immediately brought to the attention of the Owner. The Owner will be responsible for spill notifications to regulatory agencies.

3.4 CLEANING / DECONTAMINATION

- A. The Contractor shall perform necessary due diligence to confirm conditions and contents of piping, equipment, containers, tanks, buildings, and other features of the Jobsite prior to initiating abatement and demolition activities so that the Work can be conducted safely and in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.
- B. The Contractor shall clean / decontaminate all Jobsite features as appropriate in order to disconnect, abate, remove, and perform demolition Work and properly handle, manage, transport, and dispose waste in accordance with applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. Jobsite features include, but are not limited to, the following:
 - 1. Equipment
 - 2. Containers
 - 3. Tanks
 - 4. Piping
 - 5. Drains
 - 6. Sumps / pits
 - 7. Concrete, brick, and block that is stained, painted, or coated
 - 8. Surfaces that are painted / coated and contain concentrations of lead, other heavy metals, and / or polychlorinated biphenyls (PCBs) and the paint / coating is in a flaking condition
 - 9. Steel or other surfaces that are painted / coated and contain concentrations of PCBs where the Contractor must perform torching, cutting, or grinding as part of the demolition Work
 - 10. Other building materials
- C. Dry Methods
 - 1. The Contractor shall use dry methods (e.g., vacuum, vacuum truck, etc.) whenever possible to clean / decontaminate features to limit generation of contaminated wash water requiring offsite transportation and disposal, or onsite treatment and discharge to the sanitary sewer as allowed by the Owner and the Greater Peoria Sanitary District.

2. When blast media is utilized, the Contractor shall provide the Owner safety data sheets (SDSs) and manufacturer specifications for review and approval at a minimum of two weeks prior to performing the Work. During the performance of blasting Work, the Contractor shall:
 - a. Install and maintain control measures to collect and containerize generated dust and materials. Dust and materials shall not accumulate on the ground surface or enter storm sewer systems.
 - b. Install and maintain control measures and provide appropriate PPE to protect workers in accordance with Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.
 - c. Collect representative samples of collected removed material and blast media for waste characterization purposes as specified in this Section.
3. All material shall be collected, contained, characterized, and transported offsite for disposal as allowed by the Owner and specified in this Section.

D. Wet Methods

1. When water is used for cleaning / decontamination, whether by power washing or self-contained ultra-high pressure (UHP) hydroblasting, the Contractor is required to first seal all building floor drains and nearby storm sewer systems. All wash water shall be collected so as not to cause a release of contaminated water to the ground surface or to the storm sewer system.
2. The Contractor shall be responsible for cleaning up any releases immediately and to the satisfaction of the Owner. Discharge of contaminated liquids to the ground surface, storm drains present at the Jobsite is prohibited by environmental regulations. As such, the Contractor shall perform the Work in a manner that limits the amount of wash water generated requiring treatment and discharge or disposal.
3. Once collected, the material shall be contained, characterized, and transported offsite for disposal or treated for onsite discharge as allowed by the Owner, the Greater Peoria Sanitary District, and specified in this Section.

E. Flaking Paint

1. Flaking paint containing lead, other metals, and / or PCBs are present throughout the structure. Flaking paint shall be removed to the satisfaction of the Owner prior to the Contractor commencing demolition of the structure. Any delays and / or additional cost incurred by the Contractor for not obtaining approval by the Owner for sufficient removal of flaking paint shall be at the Contractor's expense.
2. Requirements for abatement / removal of paint are specified in Section 02 83 00 – Lead Control and Removal and Section 02 84 00 – PCB-Containing Material Removal.

F. Concrete, Brick, and Block

1. The Contractor may, at the Contractor's expense, scarify painted, coated, and / or oil-stained concrete, brick, and block surfaces for the purpose of recycling the underlying material. The Owner encourages recycling to the maximum extent possible. The scarified material shall be collected, sampled, and tested as specified in this Section. To be eligible for recycling, all paints, coatings, and visibly stained material must be removed.

G. Animal Waste

1. Animal waste from animals may be present in in the building. The Contractor shall remove and properly dispose offsite waste present in the building as necessary prior to demolition.

H. Street Sweeping

1. Soils and sediment collected from street sweeping services shall be disposed of offsite at an Owner approved disposal facility.

3.5 WASH WATER MANAGEMENT

- A. The Contractor shall provide all labor, power, equipment, controls, and materials necessary for the control, collection, treatment (if necessary), and disposal of wash water as required to complete the Work. Wash water includes, but is not limited to the following:

1. Water applied and collected by the Contractor during wash down of building features
2. Water generated during abatement decontamination and shower water
3. Storm water that becomes impacted by the Contractor's wash down or other operations, if any
4. Storm water and groundwater that infiltrates and collects in the basement and pits / sumps that becomes impacted by asbestos fibers, dust, debris, wash water, or other materials generated by the Contractor

- B. The Contractor shall collect wash water via vacuum truck or dedicated pump and hosing for containerization in polyethylene drums, containers, or temporary tanks (e.g., polyethylene tanks, frac tanks, etc.) based on the quantity of water to be collected.

- C. Water collected from different cleaning / decontamination areas / sources, such as asbestos abatement containments and impacted groundwater, shall be containerized separately to the extent possible.

- D. The Contractor shall furnish, install, operate, and maintain cold weather protection, such as heating, heat trace, bubblers, etc., for tanks, hosing, piping, etc. as necessary to collect, manage, and discharge / dispose wash water during freezing / winter conditions.

- E. The Contractor shall collect representative samples from collected wash water for characterization purposes to determine if the wash water can be treated sufficiently for onsite discharge to the sanitary sewer system (if approved by the Owner and the Greater Peoria Sanitary District) or wash water is required to be transported offsite for disposal. Sampling shall be performed as specified herein.

- F. Sanitary Sewer Discharge
 - 1. The Contractor shall treat collected wash water as required to meet discharge requirements for the sanitary sewer system as determined by the Owner and the Greater Peoria Sanitary District. If the Contractor is not able to treat wash water to concentrations acceptable for discharge to the sanitary sewer, the Contractor shall transport all collected wash water offsite for disposal. As specified in Section 01 51 00- Temporary Utilities, it is the Contractor's responsibility to coordinate with the utility Owner, and provide all materials, labor, and equipment necessary to initiate utility services and pay any bills associated with utility use.

 - 2. It is the responsibility of the Contractor to provide the necessary number of containers or tanks (e.g., polyethylene tanks or frac tanks) to store pre-treatment (initial collection) and post treatment liquids that allows a sufficient amount of time for characterization (sampling and laboratory analysis) and review of analytical data for discharge approval. Due to the inherent variability in constituent concentrations in wash water, characterization data and utility Owner approval will be required for the discharge of each container / tank. Tanks shall be stored within secondary containment.
 - a. Sanitary Sewer System Discharge Requirements
 - i. It is the Contractor's responsibility to obtain a permit to discharge to the sanitary sewer from the City of Peoria Department of Public Works, the Greater Peoria Sanitary District, or other regulatory agencies.
 - ii. Wash water that meets the requirements of the Contractor-obtained permit(s) and the Owner's requirements may be discharged to the sanitary sewer system.
 - iii. The Contractor shall meet all requirements stipulated by the Grater Peoria Sanitary District, which may include the following:
 - a.) Pre-treatment and post-treatment sampling per tank
 - b.) Filtration
 - c.) Treatment via oil / water separator, activated carbon, or other means
 - d.) Analysis of representative samples to ensure the water meets the requirements of the Greater Peoria Sanitary District water discharge permit and the Owner. The Contractor shall coordinate with the Greater Peoria Sanitary District to determine the required analytes.
 - iv. Once approved for discharge by the municipality and Owner, the Contractor shall be responsible for conveying the liquids to the sanitary sewer system discharge location. Hoses shall be protected as necessary from vehicular traffic and cold weather.

- v. The Contractor shall meet all requirements stipulated by the USEPA, which may include the following:
 - 40 CFR 423.17 Pretreatment standards for new sources (PSNS).
 - (b) 2015 PSNS. Except as provided in 40 CFR 403.7, any new source as of June 7, 2013, subject to this paragraph, which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and the following pretreatment standards for new sources:
 - (1) PCBs. There shall be no discharge of PCB compounds such as those used for transformer fluid.
 - (2) Chemical metal cleaning wastes. The pollutants discharged in chemical metal cleaning wastes shall not exceed the concentration listed in the following table:

Pollutant or Pollutant Property	PSNS
	Maximum for 1 Day (milligrams/Liter)
Copper, total	1.0

- vi. The Contractor shall sample and analyze water samples as required by the Contractor-obtained Greater Peoria Sanitary District water discharge permit.
- vii. The Contractor shall meter liquids discharged to the sanitary sewer system.
- viii. The Contractor shall maintain a discharge log documenting quantities discharged, including date and associated analytical data. The Contractor shall submit the discharge log to the Owner weekly.

G. Offsite Disposal

- 1. If discharge to the sanitary sewer is not practical or if the Contractor chooses offsite disposal, the Contractor shall manage, characterize, containerize, label, store, transport and dispose of the water at an Owner-approved disposal facility as specified in this Section.

3.6 WASTE MANAGEMENT – GENERAL

- A. All materials generated and classified as either waste or recyclable material shall be managed, characterized, containerized, labeled, stored, transported and disposed / recycled as specified in this Section and in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.

- B. Wastes shall be managed at the Jobsite until waste characterization data is received. Wastes shall be removed, segregated, staged, stored, and otherwise prepared for disposal in such a manner that the wastes are fully contained, protected from weather or other adverse conditions, and do not pose a threat to onsite staff and contractors.
- C. The Contractor shall submit an updated waste inventory log to the Owner on a weekly basis summarizing the following:
 - 1. Classification and approximate quantities of wastes stored onsite, including storage type (e.g., drums, roll-off containers, stockpile, etc.) and general location.
 - 2. Classification and quantities of wastes transported offsite for disposal, including utilized waste transporter and disposal facility and manifest numbers.
 - 3. Quantity of ferrous and non-ferrous recyclable materials and recycled concrete transported offsite for recycling, including utilized transporter and recycling facility.
- D. Additional requirements for specific wastes are provided in the following Sections:
 - 1. Section 02 41 00 – Demolition
 - 2. Section 02 82 00 – Asbestos Abatement
 - 3. Section 02 83 00 – Lead Control and Removal
 - 4. Section 02 84 00 – PCB-Containing Material Removal
 - 5. Section 02 87 00 – Nonhazardous and Hazardous Waste Removal
 - 6. Section 02 88 00 – Universal Waste Removal
 - 7. Section 31 23 19 – Dewatering

3.7 WASTE REMOVAL AND HANDLING – GENERAL

- A. Containers
 - 1. Wastes shall be stored in containers appropriate for the waste type and quantities and in accordance with applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.
 - 2. Roll-off containers shall be staged at locations as approved by the Owner, at locations as far away from storm water inlets as is practical.
 - 3. Roll-off containers shall be lined with polyethylene sheeting as necessary.
 - 4. Materials placed in roll-off containers shall be covered when not in use to minimize the generation of fugitive dust and odors and prevent storm water from coming in contact with materials.
- B. Stockpiles
 - 1. Stockpiling of asbestos waste is prohibited.
 - 2. Stockpiled material shall be placed on and covered with black, 10-mil (minimum thickness), nylon-reinforced, polyethylene sheeting. Polyethylene sheets shall be of sufficient length and width to cover the entire stockpile.
 - 3. If overlapping is necessary to cover the entire stockpile, sheeting shall be overlapped a minimum of four feet.

4. Stockpile covers shall be free of holes or tears. Defective material shall be replaced or repaired, as determined by the Owner.
5. The Contractor shall furnish sandbags or other weights of sufficient quantity and weight to hold the stockpile cover in place.
6. Earthen berms lined with polyethylene sheeting shall be constructed as necessary to stockpile wet materials in order to prevent free liquids from running onto adjacent surfaces.
7. Best management practices for storm water pollution control shall be used for stockpiled material.

3.8 WASTE CHARACTERIZATION

- A. In alignment with the Owner's requirements, the Contractor shall collect representative samples of materials for waste characterization purposes. The number of samples and chemical analytes shall be those required by Federal, State, local laws, ordinances, codes, rules and regulations and those required by the disposal facility and Owner that take into account how the waste was generated in order to complete an accurate characterization. The collection of samples shall be coordinated with the Owner, and an Owner's representative shall be present when samples are collected. The Contractor shall submit this information to the Owner per the Owner's requirements.
- B. Samples shall be submitted to an Owner-approved accredited laboratory under chain-of-custody procedures.
- C. Copies of analytical data shall be submitted to the Owner upon receipt from the laboratory.
- D. The Contractor shall be responsible for coordinating with the Owner and the disposal facility to prepare waste profiles and obtain waste disposal approvals. The Contractor shall submit to the Owner for review and approval a draft version of each waste profile prior to submitting it to the disposal facility. The Owner or Owner's representative shall sign all waste profiles and shipping documents.
- E. Wastes shall be managed at the Jobsite in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations until waste characterization data is received, waste profiles have been approved by the disposal facility, and the materials are loaded for transportation and offsite disposal or discharged onsite, if allowed by the Owner.

3.9 LABELING

- A. Containers shall be labeled in accordance with 40 CFR 261, 49 CFR 172, 40 CFR 761, USDOT regulations, and USEPA Resource Conservation and Recovery Act (RCRA) Hazardous Waste and Universal Waste regulations. Labeling includes, but is not limited to, the following:
 1. Initial labeling such as "WASTE-PENDING ANALYSIS," "USED OIL," or "UNIVERSAL WASTE" as applicable. Labels shall be completed indicating:
 - a. Contents
 - b. Origin of materials
 - c. Collection start date

- d. Sealed / full date
- e. Facility name
- f. Facility address
- g. Contact information
2. Final labeling based on waste characterization data, such as "NONHAZARDOUS WASTE" or "HAZARDOUS WASTE" as appropriate. Labels shall be completed indicating:
 - a. Facility name
 - b. Facility address
 - c. Content and waste type
 - d. Collection start date
 - e. Sealed / full date
 - f. USEPA RCRA waste codes / numbers (if hazardous)
 - g. USEPA RCRA hazard communication words or pictograms (if hazardous)
 - h. USEPA facility identification number (if hazardous prior to shipment)
 - i. Manifest tracking number (if hazardous prior to shipment)
 - j. USDOT hazard class label as applicable (prior to shipment)
 - k. USDOT proper shipping name (prior to shipment)

3.10 TRANSPORTATION AND DISPOSAL

A. General Requirements

1. The Contractor shall utilize Owner-approved transportation contractors and disposal facilities.
2. All generated waste shall be disposed offsite at a facility able to accept the waste as characterized by the sample data and in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. All facilities receiving project waste must be Owner approved. All waste (regulated and unregulated) and recyclable material amounts shall be tracked and provided to the Owner. Facilities receiving the following types of wastes, even if they recycle it, must be Owner-approved:
 - a. Hazardous waste
 - b. Nonhazardous waste
 - c. Universal wastes
 - d. Liquid industrial by-product
 - e. PCB waste
3. The Contractor shall identify and utilize recycling facilities that can provide the best value for recyclable materials, considering also transportation costs.
4. It is the responsibility of the Contractor to amend as necessary wet solids, such as filtered wash water, designated for offsite disposal in order to meet transportation and disposal requirements (e.g., paint filter test or other disposal facility requirements).
5. Waste shall be disposed offsite at a facility able to accept the waste as characterized by the sample data and in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.

6. It is the responsibility of the Contractor to ensure materials designated for offsite disposal or recycling will be accepted by the offsite facility prior to materials leaving the Jobsite. Materials rejected at an offsite facility shall be returned to the Jobsite and transported to an alternate, Owner-approved offsite facility at the Contractor's expense.
7. The Contractor is responsible for all vehicle permits, taxes, and fees (weight scale, routing, overweight vehicle), tolls, law enforcement issued fines, penalties, judgements, etc.

B. Transportation

1. Drums

- a. Drums shall be sealed and marked prior to loading onto transport vehicles. Drums shall be loaded onto the transport vehicle by any of the following methods:
 - i. By a hoist or lift truck utilizing a two-point drum lifter
 - ii. By a hoist or lift truck provided with a band-around type drum lifter
 - iii. By a lift truck lifting the drums from underneath by a pallet attached to the drum by a banding arrangement
 - iv. Drums shall not be lifted by:
 - a) Any rope, chain or cloth slings tied about the drum
 - b) Placement of drums on bare lift-truck forks
 - c) Forcing drums between forks of a lift truck
 - d) Any commercial drum lifters exerting force on the sides of a drum
- b. All articles, items, and containers shall be secured to the transport vehicle to prevent movement in transit.

2. Trucking

- a. The Contractor shall inspect the transportation vehicles before and after loading to ensure compliance with all Federal, State, local laws, ordinances, codes, rules and regulations for the safe transport of wastes from the Jobsite to the receiving facility.
- b. When loading, the truck and material should not exceed the truck's rated gross vehicle weight or load limits along roadways utilized to and from the Jobsite. The material shall not be placed in the bed in a manner that would allow it to fall out of the truck during transportation.
- c. Haul truck beds shall be covered, and gates secured prior to leaving the Jobsite. Truck beds shall remain covered throughout the duration of transportation to the offsite disposal facility.
- d. Truck beds shall be lined or sealed as necessary to prevent free liquids from exiting truck beds during transportation.
- e. Trucks and containers shall be labeled with USDOT-approved placards as applicable based on the type of transported waste.
- f. Trucks shall be washed / decontaminated as required to prevent track-out of materials offsite. Decontamination shall be performed as specified in this Section as applicable.

- g. Transporters shall proceed directly from the Jobsite to the designated receiving facility. Temporary staging or storage of materials at intermediate locations between the Jobsite and the receiving facility is prohibited.
- h. Transporters shall proceed from the Jobsite along set traffic routes and within appropriate weight limitations for roadways along the designated route.
- i. In the event that a loaded truck is involved in an incident that results in an offsite release of transported materials, the Contractor shall immediately notify the Owner. The Contractor shall be responsible for cleanup of released materials and shall following all local and State DOT cleanup procedures. Cost for cleanup will be solely the responsibility of the Contractor.
- j. The Contractor shall use bed liners or decontaminate truck beds as needed following disposal of impacted waste to prevent cross-contamination with future use of the truck if Contractor wishes to haul clean fill back to the Jobsite during a roundtrip.
- k. The Owner has the right to prevent any truck with visible dirt or other apparent hazard from entering or leaving the Jobsite.

C. Documentation

- 1. The Owner is the generator of record for all wastes and shall sign all waste profiles and manifests. The Contractor shall coordinate with the Owner and disposal facility to create the necessary shipping documents and manifests required to document waste generation, shipping, and disposal in accordance with applicable regulations. Each load of waste leaving the Jobsite shall be accompanied with a proper individual waste shipping paper and disposal manifest signed by the Owner, or approved designee.
- 2. The Contractor shall submit to the Owner for review and approval a draft waste manifest for each waste stream prior to shipping any waste offsite.
- 3. The Contractor shall originate, maintain, and provide the Owner copies of waste shipment manifests and / or bills of lading records for all transported materials.
- 4. The Contractor shall provide the Owner final manifests and / or bills of lading records signed by the transporter and disposal / recycling facility when received from the disposal / recycling facility.
- 5. Manifest forms and records shall be consistent with USDOT, USEPA, and Illinois Environmental Protection Agency requirements, as well as all applicable local ordinances, rules, and regulations.
- 6. The Contractor shall provide copies of all waste documentation the same day when materials are transported offsite and provide final signed manifests and disposal facility weigh tickets when received.

3.11 DECONTAMINATION OF CONTRACTOR'S EQUIPMENT

- A. Vacuum trucks, haul trucks, equipment, tools, containers, and other materials in contact with oil, fuel, chemicals and / or other contaminated media shall be decontaminated prior to demobilization or prior to reuse at a different location onsite if required by the Owner.

- B. A decontamination pad shall be set up as required to perform decontamination activities. Requirements for a decontamination pad are specified in Section 01 52 00 – Construction Facilities.
- C. Decontamination shall consist of the following general procedures:
 - 1. Pressure cleaning (by low volume, high pressure wash or steam cleaning)
 - 2. Scrubbing with brushes or use of other tools as necessary to remove solids
 - 3. Pressure rinsing (by low volume, high pressure wash or steam cleaning)
- D. Decontamination wash water and rinse water are prohibited from entering storm sewer systems.
- E. Small equipment, tools, and other materials for which decontamination is difficult or uncertain, such as hosing, plastic sheeting, sorbent pads, PPE, etc. shall be containerized and disposed offsite at a landfill approved by the Owner.
- F. Wash water and sediment collected within the decontamination pad shall be containerized as follows:
 - 1. Separate sediment from decontamination water. Sediment shall be containerized in approved 55-gallons drums or added to the contaminated material stockpile or roll-off containers. If containerized, containers shall be labeled, managed, and inspected as specified in this Section.
 - 2. Remove decontamination water from the decontamination pad using a vacuum truck or other approved method, such as a trash pump. Decontamination water shall be containerized in a polyethylene tank(s) or other container(s) approved by the Owner, until offsite disposal is arranged. Containers shall be labeled, managed, and inspected as specified in this Section.
- G. Wash water and sediment shall be removed from the decontamination pad daily to prevent build-up of sediment and the potential for storm water to come in contact with contaminated materials. The decontamination pad shall be cleaned prior to performing decontamination of haul trucks, equipment, tools, etc. from a different source area.
- H. Offsite disposal is required for all decontamination waste materials. Decontamination materials shall be transported and disposed offsite as specified in this Section.

3.12 INSPECTIONS

- A. Waste containers, storage areas, and / or stockpile(s) shall be inspected on a weekly basis by the Contractor during the performance of the Work until the waste is transported offsite for disposal. Inspection documentation completed by the Contractor shall be submitted to the Owner.

- B. Hazardous waste storage areas, if any, shall be inspected by the Contractor. Inspections shall be conducted daily for signs of leaks, corrosion, or other deterioration and those inspections shall be recorded in a log. At a minimum, these records must include the date and time of inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.
- C. Additional requirements for inspections are outlined in Section 01 41 00 – Regulatory Requirements.

END OF SECTION

SECTION 01 78 00 – CLOSEOUT REQUIREMENTS

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. The Contractor shall complete all Work as well as administrative and procedural requirements for project closeout including, but not limited to, the following:
1. Completion of the Work
 2. Final cleaning and demobilization
 3. Final acceptance of the Work
 4. Project record and other closeout submittals

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
1. Section 01 33 00 – Submittal Procedures
 2. Section 01 35 13 – Special Project Procedures
 3. Section 02 00 00 – Existing Conditions
 4. Section 32 92 19 – Seeding

1.3 SUBMITTALS

- A. Finalized punchlist.
- B. Submittals shall be provided as required in Section 01 33 00 – Submittal Procedures.

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION

3.1 INSPECTIONS

- A. Inspections will be performed by the Owner throughout the performance of the Work as outlined in Section 02 00 00 – Existing Conditions. For project closeout, the Owner will perform the following inspections:
1. Completion
 - a. Pre-final inspection
 - b. Final inspection
 2. Final Acceptance of the Work
 - a. Pre-final inspection
 - b. Final inspection

- B. The Contractor shall include inspection entries in the baseline project schedule and allot an appropriate duration to remedy issues identified during inspections, if any.
- C. Pre-Final Inspection
 - 1. The Contractor shall notify the Owner when the Work is considered complete and ready for a pre-final inspection.
 - 2. The Contractor shall accompany the Owner during the pre-final inspection.
 - 3. Items identified by the Owner as being incomplete, if any, will be documented in a punchlist. The punchlist will identify the following:
 - a. Work task considered incomplete
 - b. Location(s) where the Work is considered incomplete
 - c. Technical Specification(s) reference that outlines requirements for the Work task
 - 4. The Owner and the Contractor shall discuss the Contractor's planned approach and timeline for completing punchlist items.
 - 5. Upon completion of the items listed in the punchlist, the Contractor shall notify the Owner that a final inspection can be performed.
- D. Final Inspection
 - 1. The Contractor shall notify the Owner when the Work is considered complete and ready for a final inspection.
 - 2. The Contractor shall accompany the Owner during the final inspection.
 - 3. Items identified by the Owner as being incomplete, if any, will be documented in a punchlist. The punchlist will identify the following:
 - a. Work task considered incomplete
 - b. Location(s) where the Work is considered incomplete
 - c. Technical Specification(s) reference that outlines requirements for the Work task
 - 4. The Owner and the Contractor shall discuss the Contractor's planned approach and timeline for completing punchlist items.
 - 5. Upon completion of the items listed in the punchlist or if the Owner has determined that the Work is complete (i.e., no punchlist items), the project will be considered complete as outlined below. The Contractor shall update the punchlist to indicate how items were remedied, date items were remedied, and date the items were closed. The Contractor shall submit the finalized punchlist to the Owner.

3.2 COMPLETION

- A. The Work will be considered complete when the Contractor has completed the following Work and the Owner is in agreement the Work has been completed:
 - 1. All above grade and below grade demolition Work is complete.
 - 2. All below grade structures and utilities have been abandoned or removed, as specified, and as required by applicable regulatory and legal requirements and the Contract Documents.
 - 3. All below grade features and excavations have been backfilled.

4. All waste has been transported offsite for proper disposal and waste manifests, land disposal restriction forms, and other documentation signed by all parties has been submitted to the Owner.
 5. All recyclable materials (e.g., steel, etc.) have been transported offsite for recycling and appropriate recycling documentation has been submitted to the Owner.
 6. All punchlist items have been completed.
 7. All Jobsite restoration Work has been completed.
 8. All damaged items, if any, have been repaired / replaced.
 9. All temporary utilities have been disconnected and removed.
 10. All construction facilities have been removed.
 11. All barriers and enclosures have been removed.
 12. All Contractor equipment, materials, etc. have been demobilized from the Jobsite.
 13. All temporary sediment and erosion controls have been removed following establishment of grass (see Section 32 92 19 – Seeding).
 14. The Contractor has submitted, and the Owner has accepted all post-Work submittals (see Section 01 35 13 – Special Project Procedures).
 15. The Contractor has submitted, and the Owner has approved a certification that all Subcontractors and suppliers have been paid in full.
 16. The Contractor has submitted, and the Owner has approved the submission for Final Payment request with releases and supporting documentation not previously submitted and accepted.
 17. The Contractor has submitted, and the Owner has approved other closeout submittals identified in the Contract.
- B. Post-Work submittals shall be submitted to the Owner within 45 days of demobilization from the Jobsite. Requirements for the post-Work submittals are outlined in Section 01 35 13 – Special Project Procedures.

END OF SECTION

SECTION 02 00 00 – EXISTING CONDITIONS

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. The former Harrison School is a one to three story, 32,669 square foot building located on a 3.33-acre parcel located at 2702 West Krause Avenue, in Peoria, Peoria County, Illinois. The school was built in 1901, with additions constructed in 1922 and 1949. The building has been vacant since 2010 and is in a deteriorated state. As specified in Section 02 41 00- Demolition, the Contractor's independent third-party engineer shall perform an engineering survey prior to beginning Work in the building. The Contractor's independent third-party engineer shall designate which areas of the building are unsafe to access.
- B. To the Owner's knowledge, all utilities have been disconnected to the Jobsite. However, it is the Contractor's responsibility to confirm that all utilities have been disconnected prior to beginning the Work. If utilities are found to be active, the Contractor shall provide the labor, materials, and equipment to disconnect them.
- C. All machinery, equipment, tools, containers, and other materials located in the building or areas designated for Work and are present at the Jobsite when the Contractor mobilizes to begin demolition Work is the responsibility of the Contractor to remove and dispose or recycle, as appropriate. No items shall be removed from the Jobsite for resale or reuse.
- D. The Owner has identified several items / features of the building to be salvaged and set aside for historical preservation as specified in this Section.
- E. The Owner makes no representation, warranty, nor guarantee that the conditions indicated herein either are representative of those conditions existing throughout the buildings / structures or subsurface, or that unforeseen developments will not occur, or that materials other than, or in proportions different from, those indicated will not exist. The Contractor must perform its own due diligence regarding conditions at the Jobsite. The building is subject to frequent trespass and is quickly deteriorating.
- F. Any reuse of historic assessments, characterization data, Drawings, and / or other Jobsite information shall be at the Contractor's own risk and without legal liability on the Owner. The Contractor shall hold harmless and indemnify the Owner from and against all claims, damages, loss, liability, expenses, or costs resulting from the Contractor's interpretation of available information.
- G. Security is not provided by the Owner. The Contractor shall be responsible for providing any security it deems necessary to protect their equipment, materials, tools, recovered recyclable materials, and prevent trespass onto the Jobsite. The Contractor shall indemnify and hold the Owner harmless from all claims, damages, expenses, or cost resulting from damage, lost or stolen property.
- H. The Owner's project management personnel team will perform visits to the Jobsite periodically or more frequent to perform inspections until the Work is completed.

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
1. Section 01 14 00 – Work Restrictions
 2. Section 01 32 00 – Project Controls Requirements
 3. Section 01 33 00 – Submittal Procedures
 4. Section 01 35 13 – Special Project Procedures
 5. Section 01 51 00 – Temporary Utilities
 6. Section 01 56 00 – Barriers and Enclosures
 7. Section 01 71 00 – Jobsite Preparation
 8. Section 01 74 00 – Cleaning and Waste Management
 9. Section 02 41 00 – Demolition
 10. Section 02 84 00 – PCB-Containing Material Removal
 11. Section 02 88 00 – Universal Waste Removal
 12. Section 31 20 00 – Earthwork
 13. Section 31 23 19 – Dewatering

1.3 WORK PERFORMED BY OTHERS

- A. Utility Disconnection
1. Utilities that serviced the property were disconnected.
- B. Phase I Environmental Site Assessment
1. A contractor to the Owner completed a Phase I Environmental Site Assessment (ESA) in February 2021. The purpose of the assessment was to perform an all-appropriate inquiry into the past ownership and use of the property. The assessment identified two recognized environmental conditions; one related to onsite historical heating operations (gasoline and potential fuel oil) and the second related to a lumber mill historically located adjacent to the property. A *Phase I Environmental Site Assessment* report was prepared to summarize the results of the assessment. A copy of the report is provided in Appendix A.
 2. The Owner is not responsible for the accuracy of the information provided in the *Phase I Environmental Site Assessment* report. If contaminated soil or groundwater are identified, the Contractor shall immediately notify the Owner.

C. Pre-Demolition Site Characterization

1. A contractor to the Owner performed a pre-demolition site characterization study on the property in March 2022. The purpose of the study was to determine if hazardous building materials and / or restricted wastes were present at the property. The study included an evaluation for asbestos-containing materials (ACM) and lead-bearing paint and completing an inventory of regulated hazardous building materials. While intrusive sampling was performed as part of the survey, not all areas could be accessed, penetrated, or dismantled to identify all ACMs and other regulated materials. A *Pre-Demolition Site Characterization* report was prepared to summarize the results of the survey. A copy of the report is provided in Appendix A.
2. The Owner is not responsible for the accuracy of the information provided in the *Pre-Demolition Site Characterization* report. If previously undocumented materials are identified, the Contractor shall immediately notify the Owner. The Contractor shall perform additional sampling as necessary to confirm that materials requiring special handling are appropriately abated and disposed offsite as part of the Work.

D. Supplemental Sampling

1. A supplemental sampling effort for naturally occurring radioactive material (NORM) in glazed brick, polychlorinated biphenyls (PCBs) in caulk and paint, and lead and other metals in paint was performed on August 22, 2022. Results of the sampling effort are included in Appendix A. Not all painted surfaces were sampled.
2. The Contractor shall not rely on previously collected data but shall have the responsibility to conduct its own surveying and inspection which it shall rely on in performing the removal of lead, other metal, and / or PCB-containing material during the performance of the Work.

1.4 EXISTING UTILITIES

A. During operation of the school, utility use was comprised of the following:

1. Electrical. Electricity was provided to the site by Ameren Illinois. To the Owner's knowledge, electricity to the Jobsite has been disconnected.
2. Natural Gas. It is unknown if natural gas was used at the Jobsite. To the Owner's knowledge, there is no active natural gas connection to the Jobsite.
3. Potable Water. Potable water is supplied by the City of Peoria. To the Owner's knowledge, there is no active water connection at the Jobsite.
4. Sanitary. Sanitary sewerage discharged to the Greater Peoria Sanitary District. To Owner's knowledge, the sanitary sewer has been disconnected from the Jobsite.
5. Storm Water. Storm water that collects near the building and paved areas discharges to the City's storm sewer system which may be a combined sanitary and storm system.

B. It is the Contractor's responsibility to confirm that all utilities have been disconnected prior to beginning the Work. If utilities are found to be active, the Contractor shall provide the labor, materials, and equipment to disconnect them.

- C. It is the Contractor's responsibility to provide all labor, materials, and equipment and pay all billings associated with temporary utilities needed for the Work, as specified in the Technical Specifications, including, but not limited to the following Sections:
1. Section 01 51 00 – Temporary Utilities
 2. Section 01 74 00 – Cleaning and Waste Management

1.5 FEATURES TO BE UNDISTURBED / PROTECTED

- A. The structures / features to be included in the demolition Work are specified in these Technical Specifications and shown on the Drawings. The Contractor shall take necessary precautions to prevent damage to all other existing features designated to remain, such as, but not limited to, the following. The Contractor shall be responsible for the repair caused by construction operations of any damage to features designated to remain, at the Contractor's expense, to the Owner's satisfaction.
1. Public sidewalk
 2. Driveway into the property
 3. Trees and grassy areas
 4. Utility poles designated to remain
 5. Fencing
- B. The Contractor shall install temporary barriers / barricades for identified features as specified in Section 01 56 00 – Barriers and Enclosures.
- C. Storm water piping systems shall be protected to prevent sediment, debris, and other materials from entering the systems during the Work.

1.6 FEATURES TO BE SALVAGED FOR HISTORIC PRESERVATION

- A. The Owner has identified the following building features to be salvaged for historic preservation:
1. "19 Harrison School 01" limestone name above the front door
 2. Three limestone pediments immediately above that limestone "nameplate"
 3. Blue cloth stage curtains and top piece in one of the auditoria, with the letter "H"
 4. Limestone archways on north side of the property
 5. Third floor auditorium doors
- B. The Contractor shall remove these features from the building in a way that will not damage the items. The Contractor shall package the items in sealed crates placed on pallets. The items will be transported offsite by others. The Contractor shall load the features for transport, if necessary.
- C. Photographs of the items to be salvaged for historic preservation are provided in Appendix C.

1.7 AVAILABLE JOBSITE DRAWINGS AND OTHER OWNER-PROVIDED INFORMATION

- A. A collection of Jobsite Drawings is included in Appendix B to provide the Contractor details on the building, locations and details of utilities, and details on other features. Appendix B may not contain all pertinent details needed by the Contractor to perform the Work. It is the responsibility of the Contractor to request additional Drawings as necessary for the performance of the Work; however, due to the age of the school, additional Drawings may not be available. The Contractor shall have access to the Jobsite as requested by the Contractor. The Contractor shall have ultimate responsibility for locating all pertinent buildings, locations, details of utilities, and details of other features pertinent to the Work.
- B. Details on, and conditions of, structures and locations of underground utilities and underground structures shown on the Drawings and other provided documents are provided for informational purposes only and it is not to be inferred that all pertinent details, conditions, and locations shown / provided are precise or that all existing details, conditions and locations are depicted or detailed, or that all structures and utilities are included. It is the Contractor's responsibility to verify all structures and utilities on the Site, and verify the details, locations, and conditions concerning same, prior to performing the Work.

1.8 SUBMITTALS

- A. Work to be performed to evaluate existing conditions at the Jobsite shall be outlined in appropriate Work plans specified in Section 01 35 13 – Special Project Procedures.
- B. Work performed to evaluate existing conditions shall be summarized in the weekly progress report, as specified in Section 01 32 00 – Project Controls Requirements.
- C. Pre-Work conditions report, as specified in Section 01 71 00 – Jobsite Preparation.
- D. Submittals shall be submitted as specified in Section 01 33 00 – Submittal Procedures.

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION

3.1 SECURITY

- A. The Owner does not maintain staff onsite and will not provide security.
- B. Security during the performance of the Work, if deemed necessary by the Contractor, shall be setup and maintained by the Contractor as specified in Section 01 14 00 – Work Restrictions.

3.2 PRE-WORK CONDITIONS

- A. The Contractor shall document existing conditions prior to performance of Work as indicated in Section 01 71 00 – Jobsite Preparation.

- B. The Contractor shall perform pre-Work inspections to confirm conditions of all features of the Jobsite prior to initiating Work activities so that the Work can be planned and conducted safely and in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations, applicable to the Work.

3.3 ANIMAL CONTROL AND REMOVAL

- A. Racoons and other animals (e.g., birds, rodents, etc.) may be present at the Jobsite. Waste from these animals may also be present in the structure. It is the responsibility of the Contractor to remove and relocate animals in accordance with Federal, State, local laws, ordinances, codes, rules and regulations prior to initiating demolition. Following removal, it is the responsibility of the Contractor to implement measures to prevent animals from re-entering the structures.
- B. Animal waste within the structures shall be removed by the Contractor prior to initiating demolition of the structures as appropriate. Waste shall be transported and disposed offsite in accordance with Federal, State, local laws, ordinances, codes, rules and regulations.

3.4 ENERGIZED SYSTEMS

- A. To the best of the Owner's knowledge all utilities have been disconnected from the Jobsite. It is the responsibility of the Contractor to confirm prior to abating, disconnecting, dismantling, removing, or demolishing any material, equipment, utility, building, etc. that said material, equipment, utility, building, etc. is completely de-energized.
- B. Active underground utilities may exist within the limits of Work. Utility locating will be required prior to commencement of any ground intrusive activities, as specified in Section 01 71 00 – Jobsite Preparation. Utilities and other underground structures shown on the Drawings are shown diagrammatically and it is not to be inferred that the locations shown are precise or that all existing utilities and underground structures are depicted. It is the Contractor's responsibility to verify the location of all underground utilities and structures located within the area of the Jobsite prior to conducting ground intrusive activities.

3.5 PIPING SYSTEMS

- A. The school was heated via steam generated by a boiler. A coal storage area is present in the basement. Historical records indicate the presence of gasoline engines in 1902 and other heating methods such as fuel oil may have been used over the years. It is unknown if piping containing coal, fuel, or oil is still present onsite.
- B. The Contractor shall drain and remove piping as specified in Section 02 41 00 – Demolition.

3.6 PAINTED SURFACES

- A. Elevated concentrations of lead, other metals, and / or polychlorinated biphenyls (PCBs) have been detected in paints on surfaces in the structure. Paint throughout the structure is noted to be flaking. Detected concentrations are summarized in the *Pre-Demolition Site Characterization* survey and supplemental sampling reports provided in Appendix A.
- B. The sampling effort performed as part of the *Pre-Demolition Site Characterization* survey and supplemental sampling effort are not considered comprehensive. It was observed during the supplemental sampling effort that painted surfaces include multiple layers of paint of varying colors. Utilizing the surface paint color as a means to delineate lead and / or PCB impacts is not acceptable. It will be the responsibility of the Contractor to collect additional samples as necessary and based on the Contractor's means and methods to delineate the extent of lead- and PCB-containing paint to determine the following:
 - 1. Where removal of lead-containing paint will generate a hazardous waste or nonhazardous waste
 - 2. Where removal of PCB-containing paint will generate PCB-contaminated waste or PCB remediation waste
- C. Removal of lead- and PCB-containing paint shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management, Section 02 83 00 – Lead Control and Removal and Section 02 84 00 – PCB-Containing Material Removal.

3.7 BASEMENT AND PITS / SUMPS

- A. Storm water and groundwater may infiltrate into the basement of the building during the Work. The Contractor shall dewater the basement as necessary until the basement is demolished. Dewatering shall be performed as specified in Section 31 23 19 – Dewatering.

3.8 SUBSURFACE ENVIRONMENTAL CONDITIONS

- A. No environmental data is available documenting subsurface conditions. As such, the Contractor shall notify the Owner immediately if contaminated material is encountered during any ground intrusive activities.

3.9 WORK TO BE PERFORMED BY OTHERS

- A. The Owner's project management personnel team will perform visits to the Jobsite periodically or more frequent to perform inspections until the Work is completed. Duties of the Owner's team may include, but are not limited to, the following:
 - 1. Assisting the Contractor with understanding Jobsite conditions.
 - 2. Observing and monitoring the Contractor's adherence to health and safety regulations and Owner requirements.
 - 3. Observing and monitoring asbestos abatement and all associated Work for adherence to Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work, and Owner requirements.

4. Observing and monitoring demolition Work for adherence to Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work, and Owner requirements.
 5. Monitoring the Contractor's conformance to permit requirements.
 6. Monitoring the Contractor's adherence to the Contractor's submitted and reviewed Work plans.
- B. To the extent requested by Owner, the Contractor shall escort the Owner's project personnel for observations and inspections within the Contractor's Work area, including active abatement enclosures. Issues identified shall be discussed and resolved expeditiously as required by regulation and / or the Owner.

END OF SECTION

SECTION 02 41 00 – DEMOLITION

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. The Contractor shall provide all labor, equipment, materials, and personal protective equipment (PPE) necessary to perform demolition Work via manual dismantlement techniques. For the purposes of these Technical Specifications, manual dismantlement is defined as the systematic and controlled top-down dismantling and demolition of a structure using cranes for rigging and dismantling and / or wrecking ball for structures at heights greater than the reach of the Contractor's excavators. Once structures are dismantled to a reachable excavator height, demolition can continue via excavators with appropriate attachments. Per this definition, the deliberate collapse of the whole or part of a building or structure where the structure height is greater than the reach for excavators is not allowed.
- B. The demolition Work includes, but is not limited to, the following:
1. Abatement of asbestos-containing materials (ACM) and removal of other regulated materials, including flaking paint containing lead, other metals, and / or polychlorinated biphenyls (PCBs)
 2. Removal and packaging of items designated for historical preservation
 3. Demolition of designated above grade structures and features, the structure basement and foundations shall be completely removed
 4. Demolition / removal of all underground utilities and piping, including, but not limited to electrical and data conduit, steam, fuel, water, sanitary sewer, and storm drains encountered during removal of foundations and other below grade features
 5. Removal of all pavements, excluding the sidewalk and the driveway approaches located within the City of Peoria right-of-way
 6. Performing noise and air monitoring during demolition Work
- C. Regulated Materials
1. The Contractor shall perform removal / abatement of regulated materials, including, but not limited to, nonhazardous waste, ACM, lead and other heavy metals in materials, hazardous waste, universal waste, and PCB-containing material as required by regulation prior to performing demolition Work.
 2. PCBs have been detected in paint of various colors throughout the structure, with a sample of one color at a concentration of 50 parts per million (ppm) and the remaining samples at concentrations less than 50 ppm. The Toxic Substances Control Act (TSCA) limit for PCBs is 50 ppm. A composite sample of various paint colors indicated lead at a toxicity characteristic leaching procedures (TCLP) concentration of 17 ppm, exceeding the hazardous waste limit 5 ppm. Paint throughout the structure is observed to be flaking and paint chips are present on ground surfaces, mixed with dust and other debris. The Contractor shall remove PCB- and / or lead-containing paint prior to performing demolition as specified herein.

3. Requirements for performing regulated material removal / abatement are indicated in Section 02 82 00 – Asbestos Abatement, Section 02 83 00 – Lead Control and Removal, Section 02 84 00 – PCB-Containing Material Removal, Section 02 87 00 – Nonhazardous and Hazardous Waste Removal, and Section 02 88 00 – Universal Waste Removal.
- D. The Contractor shall perform an engineering survey as required by Illinois Occupational Safety and Health Administration (OSHA) prior to commencement of Work. The survey shall be completed by an independent third-party engineering firm and stamped by a professional engineer licensed in the State of Illinois. As Specified in Section 02 00 00 – Existing Conditions, the structure is in a deteriorating state. Prior to the commencement of work, the Contractor’s independent third-party engineer shall visit the Jobsite and determine if any areas of the building are unsafe to access.
- E. As part of the demolition Work, the Contractor shall perform the following:
1. Prior to Commencing Demolition Work
 - a. Install and maintain control measures to prevent liquids, materials, asbestos fibers, dust, and other debris from entering storm water systems located onsite.
 - b. Validate that the building has been de-energized prior to commencing demolition activities.
 - c. Assess and confirm conditions and contents of piping, equipment, containers, the building, and other features of the Jobsite prior to initiating demolition activities so that the Work can be conducted safely and in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.
 - d. Remove any remaining chemicals and other materials present as needed to prevent release of materials during demolition Work. Materials shall be characterized, handled, managed, stored, transported, and disposed offsite as specified and in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. Materials shall be managed as specified in Section 01 74 00 – Cleaning and Waste Management, Section 02 87 00 – Nonhazardous and Hazardous Waste Removal, and Section 02 88 00 – Universal Waste Removal.
 - e. Identify materials that may be suspect to contain asbestos, lead or other heavy metal coatings, and / or PCBs and which require removal prior to demolition. When identified and separate handling is necessary, the Contractor shall characterize, abate / remove, handle, manage, store, transport, and dispose the materials as specified in Section 02 82 00 – Asbestos Abatement, Section 02 83 00 – Lead Control and Removal, Section 02 84 00 – PCB-Containing Material, or Section 02 87 00 – Nonhazardous and Hazardous Waste Removal as appropriate and in accordance with all applicable Federal, State, local laws, codes, ordinances, rules and regulations applicable to the Work.
 - f. Remove and package items designated for historical preservation, as specified in Section 02 00 00 – Existing Conditions.

2. During Execution of Demolition Work
 - a. Perform all ground intrusive activities in accordance with Section 01 71 00 – Jobsite Preparation and Section 31 20 00 – Earthwork.
 - b. Maintain removal of water from the basement and excavations until the basement is demolished and excavations backfilled. Dewatering shall be performed in accordance with Section 31 23 19 – Dewatering.
 - c. Perform demolition Work in a manner that does not structurally compromise and / or damage items that have been designated to remain, as specified in section 02 00 00- Existing Conditions.
 - d. Recover materials for recycling (as monetary value). Recyclable materials may include, but are not limited to, the following:
 - i. Concrete, brick, and block; only that is not painted, coated, and has no visual evidence of staining unless otherwise indicated by the Owner
 - ii. Jobsite equipment
 - iii. Electrical equipment
 - iv. Piping and associated materials, such as valves, filters, and supports
 - v. Specialty metals
 - vi. Structural steel
 - vii. Miscellaneous steel / metals, such as enclosures, flashing, roofing, and other cold-rolled materials
 - viii. Concrete reinforcing steel (i.e., rebar)
- F. The Contractor shall manage, collect, store, transport, and dispose demolition debris and waste in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. Demolition debris and waste includes building materials, equipment, debris, and materials that cannot be recycled for monetary value. In general, this task includes temporary collection and storing of solid waste and liquid industrial by-product; waste characterization; management and storage of materials onsite until waste characterization data is received; packaging, preparing, and loading of all materials; and transporting for or arrangements for proper disposal offsite.
- G. The Contractor shall manage, collect, store, transport, and recycle all recyclable materials in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. In general, this task includes management and storage of materials onsite; recycle material characterization; packaging, preparing, and loading all recyclable materials; and transporting for or arrangements for transport and proper recycling offsite.
- H. The Contractor shall restore the Jobsite as specified herein, Section 31 20 00 – Earthwork, and shown on the Drawings.
- I. Demolition activities described in this Section shall be completed in accordance with these Technical Specifications and all applicable Federal, State, local laws, ordinances, codes, rules and regulations, and industry standards applicable to the Work.

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
1. Section 01 32 00 – Project Controls Requirements
 2. Section 01 33 00 – Submittal Procedures
 3. Section 01 35 13 – Special Project Procedures
 4. Section 01 41 00 – Regulatory Requirements
 5. Section 01 52 00 – Construction Facilities
 6. Section 01 54 00 – Construction Aids
 7. Section 01 56 00 – Barriers and Enclosures
 8. Section 01 56 16 – Dust and Odor Controls
 9. Section 01 57 13 – Temporary Erosion and Sediment Control
 10. Section 01 71 00 – Jobsite Preparation
 11. Section 01 74 00 – Cleaning and Waste Management
 12. Section 02 00 00 – Existing Conditions
 13. Section 02 82 00 – Asbestos Abatement
 14. Section 02 83 00 – Lead Control and Removal
 15. Section 02 84 00 – PCB-Containing Material Removal
 16. Section 02 87 00 – Nonhazardous and Hazardous Waste Removal
 17. Section 02 88 00 – Universal Waste Removal
 18. Section 31 20 00 – Earthwork
 19. Section 31 23 19 – Dewatering
 20. Section 32 92 19 – Seeding
- B. Work outlined in this Section shall be performed in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. References to regulatory requirements are included in Section 01 41 00 – Regulatory Requirements. The Contractor shall comply with all authorities having jurisdiction over the Work.
- C. Owner Files and Drawings
1. Appendix A
 - a. A *Pre-Demolition Site Characterization* survey report is included in Appendix A. Details provided in Appendix A are not considered all inclusive. The Contractor shall be responsible for identifying and verifying presence, types, locations, and conditions of lead, other metals, ACM, and PCBs present at the Jobsite, whether included in the *Pre-Demolition Site Characterization* survey report or discovered during the Work.
 - b. A supplemental sampling effort for naturally occurring radioactive material (NORM) in glazed brick, PCBs in caulk and paint, and lead and other metals in paint was performed in August 2022. Results of the sampling effort are included in Appendix A. Not all painted surfaces were sampled. The Contractor shall not rely on previously collected data but shall have the responsibility to conduct its own surveying and inspection which it shall

rely on in performing the removal of lead, other metal, and / or PCB-containing material during the performance of the Work.

2. Appendix B

- a. A collection of Jobsite Drawings and other Owner information are included in Appendix B to provide the Contractor details of the building, locations and details of utilities, and details on other features.
- b. Appendix B may not contain all pertinent details needed by the Contractor to perform the Work. It is the responsibility of the Contractor to request additional Drawings as necessary for the performance of the Work; however, due to the age of the school, additional Drawings may not be available. The Contractor shall have access to the Jobsite, as requested by the Contractor. Details on, and conditions of, the structure and locations of underground utilities and structures shown on the Drawings and other provided documents are provided for informational purposes only and it is not to be inferred that the details, conditions, and locations shown / provided are precise or that all existing conditions are depicted or detailed. It is the Contractor's responsibility to verify details, locations, and conditions prior to performing the Work.

1.3 SUBMITTALS

- A. Work to be performed during demolition / removal shall be outlined in appropriate Work plans specified in Section 01 35 13 – Special Project Procedures.
- B. Engineering survey by the Contractor's independent third-party engineering firm.
- C. Permits shall be submitted as specified in Section 01 35 13 – Special Project Procedures.
- D. Noise and air monitoring data.
- E. Work performed and progress during demolition / removal shall be summarized in the weekly progress report, as specified in Section 01 32 00 – Project Controls Requirements, and in the construction summary report, as specified in Section 01 35 13 – Special Project Procedures.
- F. Completed inspection forms and waste inventories shall be included in the weekly progress report, as specified in Section 01 32 00 – Project Controls Requirements.
- G. Submittals associated with analytical for waste characterization and profiling and waste documentation is specified in Section 01 74 00 – Cleaning and Waste Management.
- H. Submittals shall be submitted as specified in Section 01 33 00 – Submittal Procedures.

1.4 PERMITS, LICENSES, CERTIFICATIONS

- A. The Contractor is responsible for obtaining all necessary permits for the Work, from the City of Peoria, Illinois Environmental Protection Agency (EPA), or other necessary County, State, and Federal agencies. The Contractor shall submit draft versions of Contractor-prepared permits and notifications to the Owner prior to submission to the appropriate agency.
- B. The Contractor shall have all necessary licenses to perform the Work.

PART 2 – PRODUCTS

2.1 EQUIPMENT

- A. The Contractor shall provide, power, operate, control, and maintain all equipment necessary for the performance of the Work. Equipment shall be operated and maintained in accordance with manufacturer's recommendations and requirements.

2.2 HAUL TRUCKS

- A. The Contractor shall provide Owner-approved, US Department of Transportation (USDOT)-compliant transport vehicles in good condition, empty, and clean (decontaminated of formerly hauled materials).

2.3 MATERIALS

- A. The Contractor shall provide all necessary materials to perform the Work. Materials shall be delivered to the Jobsite; handled, stored, and protected; and utilized as specified by manufacturer's recommendations and requirements.

2.4 CONTAINERS AND PACKAGING

- A. The Contractor shall provide USDOT-compliant containers in good condition, empty, and clean (decontaminated of formerly stored materials). Containers include drums, as required for small quantity containerization, or roll-off boxes and steel tanks for larger quantities of materials. Containers shall be made of materials compatible with the type of waste(s) being stored.

2.5 SAFETY AND SIGNAGE

- A. The Contractor shall provide all materials, equipment, PPE, facilities, and personnel required to perform the Work in accordance with Federal, State, and local health and safety rules and regulations applicable to the Work.
- B. The Contractor shall provide and install safety signage as required by the OSHA and Illinois OSHA.

- C. The Contractor shall provide and install signage for nonhazardous and hazardous collection and storage areas, labels and markings for containers, and placards for transportation vehicles as required by Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.

2.6 SPILL RESPONSE

- A. The Contractor shall provide appropriate spill response materials including, but not limited to the following: containers, absorbents, shovels, and PPE. Spill response materials shall be available at all times when contaminated materials / wastes are being handled or transported. Spill response materials shall be compatible with the type of materials and contaminants being handled.

PART 3 – EXECUTION

3.1 NOTIFICATIONS

- A. The Contractor shall notify the Owner prior to commencing new Work tasks. For Work where regulatory agencies must be notified, the Contractor shall notify the Owner of planned Work up to 21 days prior to commencing Work. Work shall not begin until authorized by the Owner and required notifications to appropriate regulatory agencies have been made and acknowledged.
- B. It is the responsibility of the Contractor to coordinate the presence of regulatory agency and / or local municipal representatives for Work where a representative must be present to perform an inspection. The Contractor shall notify the Owner when regulatory agency and local municipal representatives are scheduled to be present at the Jobsite.
- C. If previously unknown contaminated materials are encountered during performance of demolition or earthwork activities, Work in the area shall cease until the Contractor and Owner discuss appropriate response actions, including requirements for health and safety. The Owner will notify appropriate regulatory agencies of the discovery of contaminated material.

3.2 EXISTING CONDITIONS

- A. The Contractor shall evaluate existing conditions in areas of Work as specified in Section 02 00 00 – Existing Conditions to identify, evaluate, control, and mitigate hazards present or that may be encountered during the Work.
- B. The Contractor shall remove / clean any remaining chemicals, and other nonhazardous or hazardous waste present as needed to prevent release of materials during demolition / removal Work. Materials shall be removed, characterized, handled, and disposed offsite as specified in Section 01 74 00 – Cleaning and Waste Management and in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.

- C. Engineering Survey
 - 1. The Contractor shall procure an independent third-party engineering Subcontractor to perform the following:
 - a. An engineering survey as required by Illinois OSHA of structures to be demolished
 - 2. The engineering survey shall be performed by a professional structural engineer licensed in the State of Illinois. The professional structural engineer shall assess the Jobsite in person. Site-specific conditions will be incorporated into the Contractor's Work plan(s). The survey shall include, but not be limited to, assessing the following:
 - a. Condition of foundations, floors, walls, structural elements, and roof
 - b. Utilities servicing the structure and other features that need to be disconnected
 - c. Whether adjacent buildings and structures will be affected by the Work
 - d. Any other conditions that may affect the safety of personnel and the success of the Work
 - e. Delineation of areas of the building that are unsafe to access
 - 3. Results of the survey and evaluation shall be documented, submitted to the Owner, and documentation maintained at the Jobsite during the performance of the Work.
- D. The buildings and structures designated to be demolished are considered vacated. The Contractor shall verify that the buildings and structures are vacant each day before demolition Work commences.
- E. Protection of Existing Structures / Features and Systems
 - 1. The structures / features to be included in the demolition Work are shown on the Drawings. The Contractor shall ensure all remaining property features are protected during the Work. Additional requirements for protection of existing structures / features and systems are specified in Section 02 00 00 – Existing Conditions.

3.3 HEALTH AND SAFETY

- A. The Contractor shall limit access to the area of Work to authorized, trained, and protected personnel only. Authorized, trained, and protected personnel include workers who have completed and have up-to-date training applicable to the hazards of the Work and have appropriate PPE for health and safety hazards present in the area of Work.
- B. Hot Work
 - 1. Contractor's Controlled Construction Zone
 - a. The Contractor shall prepare a hot Work permit each day, for each area where hot Work is being performed
 - b. The Contractor shall follow the Contractor's hot Work procedure that conforms to requirements by OSHA and Illinois OSHA

- c. The Contractor shall notify the Owner each day that a hot Work permit is issued, prior to commencing the Work
 - d. Hot Work permits shall be accessible in the Contractor's construction trailer and be available for review by the Owner
 - 2. The Contractor shall supply (and have in the area of Work) adequate fire protection and control measures when cutting and torching activities are performed. The Contractor shall also inform the local fire department(s) of the schedule for demolition / removal Work.
- C. Confined Space Entry
 - 1. The Contractor shall identify any confined spaces and ensure proper signage is installed and maintained to warn workers. If the Contractor determines that confined space entry Work is necessary for the performance of the Work, the Contractor shall notify the Owner and all Work procedures and safety measures shall be discussed prior to performing the Work.
 - a. The Contractor shall follow the Contractor's confined space entry procedure that conforms to requirements by OSHA and Illinois OSHA
- D. The Contractor shall perform air monitoring to determine appropriate safety and personal protective measures to be implemented. Air monitoring parameters shall be based on contaminants of concern and may include organic vapors, flammable explosive conditions, lead, dust and / or silica.
- E. The Owner does not have emergency first-responder services onsite. It is the responsibility of the Contractor to procure and setup any necessary emergency first-responder services. The Contractor shall inform the Owner of any agreements with third-party emergency services.
- F. The Contractor's health and safety officer shall be onsite during all demolition / removal activities. The health and safety officer shall notify the Owner immediately or as soon as possible of a health and safety incident, accident, fire, or other emergency.

3.4 SPILL RESPONSE

- A. The Contractor shall respond to a spill as specified in Section 01 74 00 – Cleaning and Waste Management.

3.5 BARRIERS AND ENCLOSURES

- A. The Contractor shall install a temporary fence to enclose the Jobsite to restrict unauthorized access (e.g., the public, etc.) to the Contractor's Work areas. Fencing requirements are specified in Section 01 56 00 – Barriers and Enclosures.
- B. The Contractor shall install safety signage on barriers and enclosures as required by OSHA and Illinois OSHA. Barricades shall be in place during working and nonworking hours until the removal Work is completed.

- C. When inspections of the Work area are required or requested, such as by the Owner or regulatory agencies, a representative from the Contractor that is familiar with the Work and safety protocols shall escort the personnel for the duration of the inspection.
- D. Additional requirements for barriers and enclosures are specified in Section 01 56 00 – Barriers and Enclosures.

3.6 TRAFFIC CONTROL

- A. If temporary traffic control is required exterior of the Jobsite, for activities such as hauling, the Work shall be coordinated with the Owner in advance. Traffic control requirements are specified in Section 01 56 00 – Barriers and Enclosures.

3.7 CONSTRUCTION AIDS

- A. The Contractor shall furnish, install, and maintain as long as necessary and remove when no longer required, safe and adequate scaffolding, ladders, staging, platforms, railings, hoisting equipment, etc., as required for proper execution of the Work.
- B. All construction aids shall conform to applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work for protection of workers and the public.
- C. Requirements for construction aids are specified in Section 01 54 00 – Construction Aids.

3.8 GENERAL DEMOLITION REQUIREMENTS

- A. The Contractor shall provide all labor, power, equipment, materials, and PPE necessary to perform demolition / removal of designated structures and features in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.
- B. The Contractor shall install and maintain temporary storm water protection and erosion and sediment controls throughout the performance of demolition Work as specified in Section 01 57 13 – Temporary Erosion and Sediment Controls.
- C. Residential, light commercial, public sidewalks and roadways, and a school are located adjacent or in close proximity to the Jobsite. As such, the Contractor shall implement robust fugitive dust and odor controls as specified in Section 01 56 16 – Dust and Odor Controls. Dust migration and track-out of materials beyond the Jobsite boundary is strictly prohibited. Air monitoring, as well as noise monitoring, shall be performed as specified herein.
- D. Prior to commencing ground intrusive Work, the Contractor shall perform utility locating, as specified in Section 01 71 00 – Jobsite Preparation, throughout the planned area of Work.

- E. The Contractor shall have spill response equipment available at areas of Work where machinery, equipment, tools, containers, and piping are being removed and shall prevent spills and releases.
- F. The Contractor shall install and maintain control measures to prevent liquids, materials, asbestos fibers, dust, and other debris from entering storm water systems. Liquids, materials, asbestos fibers, dust, and other debris in the basement and pits / sumps that comes in contact with storm water or groundwater shall be collected, stored, managed, and transported offsite for disposal by the Contractor until these features are cleaned by the Contractor, at the Contractor's expense, to the Owner's satisfaction.
- G. Prior to performing demolition / removal Work, the Contractor shall confirm that material, equipment, utility, building feature, etc. being demolished / removed is at a de-energized energy state as specified in Section 02 00 00 – Existing Conditions.
- H. The Contractor shall remove and package items identified by the Owner for historic preservation, as specified in Section 02 00 00- Existing Conditions.
- I. Demolition / removal Work shall be performed in a manner that does not structurally compromise building structures or features in and surrounding areas of Work that are designated to remain.
- J. During demolition / removal Work, structure walls, elevated piping and equipment, and other materials at height shall not be left unsupported or in such condition that they may fall or collapse due to unstable conditions or vibration from equipment or wind.
- K. Demolition Work is to be performed in a manner that minimizes generating wastes and maximizes generation of recyclable materials.
- L. Should uncharted, or incorrectly charted, piping or utilities be encountered during ground intrusive Work that are not marked on the Drawings, the Contractor shall consult with the Owner to determine if the piping or utility can be abandoned or needs to be protected.
- M. The Contractor shall maintain removal of water (infiltrated groundwater and / or storm water) from the basement and excavations until features are backfilled. Dewatering shall be performed in accordance with Section 31 23 19 – Dewatering.
- N. During demolition, debris shall be handled, managed, transported, and disposed offsite as specified in Section 01 74 00 – Cleaning and Waste Management. Materials that have monetary value (as recyclable materials) shall be segregated from materials designated as waste. Coated, painted, stained or otherwise contaminated concrete, brick, or block shall be segregated from general demolition debris and concrete, brick, and block designated for recycling. Coated, painted, stained or otherwise contaminated concrete, brick, and block shall be handled as specified in this Section.
- O. The Contractor shall conduct demolition operations and transportation of waste and recyclable materials to ensure minimum interference with roads, streets, businesses, and neighborhoods adjacent to the property.

- P. Upon completion of demolition activities and prior to Jobsite restoration, the Contractor shall collect and transport for offsite disposal / recycling miscellaneous materials located near areas of the Work, such as concrete debris, etc., as directed by the Owner.

3.9 REGULATED MATERIALS

- A. The Contractor shall perform removal / abatement of accessible regulated materials, including nonhazardous industrial material, ACM, lead in construction materials, hazardous waste, universal waste, and PCB-containing material as required by regulation prior to performing demolition / removal Work.

B. Painted Surfaces

1. PCBs have been detected in paint of various colors throughout the structure, with a sample of one color at a concentration of 50 ppm and the remaining samples at concentrations less than 50 ppm. The TSCA limit for PCBs is 50 ppm. A composite sample of various paint colors indicated lead at a TCLP concentration of 17 ppm, exceeding the hazardous waste limit 5 ppm. Paint throughout the structure is observed to be flaking and paint chips are present on ground surfaces, mixed with dust and other debris. The Contractor shall remove PCB- and / or lead-containing paint prior to performing demolition as follows:
 - a. All Work shall be performed within a sealed enclosure(s).
 - b. Flaking paint shall be removed from all painted surfaces via dry techniques (e.g., scrapping), as specified in Section 01 74 00 – Cleaning and Waste Management.
 - c. All floor surfaces shall be decontaminated via either vacuum equipped with high-efficiency particulate air (HEPA) filters, power washing, or other method approved by the Owner.
 - d. Collected materials shall be containerized, managed, characterized, transported and disposed offsite as specified.
2. Flaking paint shall be removed to the satisfaction of the Owner prior to the Contractor commencing demolition of the structure. Any delays and / or additional cost incurred by the Contractor for not obtaining approval by the Owner for sufficient removal of flaking paint shall be at the Contractor's expense.
3. It is expected that deteriorated ACM is also present in floor debris in several locations of the structure. As such, the Contractor may abate / remove lead- and PCB-containing paint during abatement Work.

C. Asbestos-Containing Materials

1. The Contractor shall perform intrusive Work as necessary to open intact areas where ACMs may be present but have not been previously abated or sampled extensively, including, but not limited to, the following:
 - a. Insulating layers at various elevations inside of the walls
 - b. Insulating layers / materials at various elevations within building / structure walls, such as cementitious panels (e.g., transite) and / or granular vermiculite

- c. Insulating layers and mastics on pipes, walls, floors, and ceilings
 - 2. Should additional ACM be discovered by the Contractor, the Contractor shall abate ACM discovered as required for demolition. Abatement shall be completed in accordance with Section 02 82 00- Asbestos Abatement.
 - 3. ACM to be Abated during Demolition by the Contractor
 - a. If ACMs are present that, in the Contractor's opinion, can only be accessed and removed during demolition / removal Work, the area(s) where these materials are present, and the type(s) of materials present shall be discussed with the Owner. It is the Owner's expectation that ACMs are abated prior to commencing demolition if possible.
 - b. When regulation requires abatement prior to commencing demolition but in the opinion of the Contractor the materials can only be accessed during demolition, the Contractor shall notify the Owner and then get a variance, in writing, from Illinois OSHA and / or the Illinois EPA to allow removal / abatement during demolition. Any requirements stipulated by Illinois OSHA and /or Illinois EPA shall be the responsibility of the Contractor.
 - c. Prior to commencing demolition, the Contractor shall perform the following:
 - i. The area(s) where materials are present shall be marked with spray paint or other approved method so the materials can be identified as the demolition Work progresses.
 - ii. The Contractor shall submit to the Owner marked Jobsite Drawings showing the precise location(s) of the materials and what type(s) of materials are present.
 - iii. The Contractor shall submit to the Owner a brief summary of the means and methods the Contractor will employ to identify the materials during demolition and remove / abate the materials when they are reached.
 - d. When the known area is encountered during the demolition Work, the Contractor shall remove / abate, handle, and dispose the materials as specified.
- D. Prior to commencing demolition Work on a structure, the Contractor and the Owner shall inspect the structure / area of demolition to perform a final verification that regulated materials have been removed. If materials are identified that can be removed prior to commencing demolition, the Contractor shall remove the materials as specified.
- E. During demolition / removal Work, the Contractor shall identify materials that may be suspect to contain asbestos, lead coatings, paint, and / or PCBs. When identified, the Contractor shall sample, characterize, abate / remove, handle, store, and dispose the materials in accordance with Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. However, removal of lead (or other heavy metal)-containing paint or coatings and PCBs may not be necessary if the materials can be managed as landfillable construction material.
- F. Additional requirements for regulated materials are specified in the following Sections:

1. Section 01 74 00 – Cleaning and Waste Management
2. Section 02 82 00 – Asbestos Abatement
3. Section 02 83 00 – Lead Control and Removal
4. Section 02 84 00 – PCB-Containing Material Removal
5. Section 02 87 00 – Nonhazardous and Hazardous Waste Removal
6. Section 02 88 00 – Universal Waste Removal

3.10 MACHINERY, EQUIPMENT, TOOLS, AND CONTAINERS

- A. All machinery, equipment, tools, containers, and items located within the Work area designated for demolition and are present at the Jobsite when the Contractor mobilizes, are the responsibility of the Contractor to remove and dispose or recycle, as appropriate. This includes the items within structures / features to be demolished and in grassy, paved, or gravel areas located within the Jobsite boundary. No machinery, equipment, tools, or containers shall be removed from the Jobsite for resale or reuse.
- B. Requirements for removal of machinery, equipment, tools, containers, and items include, but are not limited to, the following:
 1. Machinery, equipment, tools, and containers shall be inspected to confirm the presence or absence of chemicals, such as lubricating oil, fuel oil, raw or spent materials, and regulated materials.
 2. Machinery, equipment, tools, and containers that contain liquids or residuals shall be drained / emptied and flushed as required for disposal or recycling. Materials of different types, such as liquids versus solids, and sources, such as fuel oil versus solvents, shall be containerized separately and stored separately.
 3. The Contractor shall confirm the classification of contents, such as PCB-containing, nonhazardous, etc. and handle and dispose contents (and equipment if applicable) as classified and in accordance with Section 02 84 00 – PCB-Containing Material Removal, Section 02 87 00 – Nonhazardous and Hazardous Waste Removal, and Section 02 88 00 – Universal Waste Removal, as appropriate. Sampling of contents for waste characterization, if required, shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.
 4. Prior to disconnecting any piping connected to machinery, equipment, or containers, the Contractor shall have spill response equipment available at the area of Work. Cleanup of spills or releases caused by the Contractor shall be the responsibility of the Contractor and shall be remediated to the satisfaction of the Owner at the Contractor's expense.
- C. Once removed from their locations, machinery, equipment, tools, and containers shall be placed in covered roll-off boxes or stockpiled, as appropriate, and managed onsite until transportation and disposal or recycling is performed. Machinery, equipment, tools, and containers that have monetary value (as recyclable materials) shall be segregated from materials designated as waste.
- D. Management, transportation, and disposal / recycling shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.

3.11 UTILITIES / PIPING

A. General Removal Requirements

1. Prior to disconnecting any piping, the Contractor shall have spill response equipment available at the area of Work. Cleanup of spills or releases caused by the Contractor shall be the responsibility of the Contractor and shall be remediated to the satisfaction of the Owner at the Contractor's expense.
2. All piping (water, sanitary, steam, fuel, gas, electrical, etc.) encountered or otherwise designated on the Drawings shall be completely removed with the exception of the following:
 - a. Piping that if removed would create, in the opinion of the Contractor's excavation competent person (as defined by 29 CFR 1926) and agreed to by the Owner, structural instability of Jobsite soils in proximity to features that are to remain in place, such as utility structure / poles, etc.; this piping shall be abandoned via concrete plug
 - b. Piping that extends beyond the limits of Work; this piping shall be abandoned via concrete plug
3. Piping / conduit / cable / wiring shall be removed via excavation and cut / severed and not be removed via pulling unless approved by the Owner.
4. Piping that contains liquid chemicals or chemical residuals shall be drained / emptied and flushed as required. Drained and flushing liquids shall be containerized. Materials of different types, such as liquids versus solids, and sources, such as fuel oil versus solvents, shall be containerized separately and stored and managed separately.
5. The Contractor shall confirm the classification of contents and handle and store contents as classified and in accordance with Section 02 82 00 – Asbestos Abatement, Section 02 83 00 – Lead Control and Removal, Section 02 84 00 – PCB-Containing Material Removal, or Section 02 87 00 – Nonhazardous and Hazardous Waste Removal, as appropriate.
6. Sampling of contents for liquid and solid waste characterization shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.
7. Once removed from their locations, piping shall be cut / sized in length as required by disposal and recycling facilities, and placed in roll-off boxes or stockpiled, as appropriate, and managed onsite until transportation and disposal or recycling is performed.
8. Piping and other materials that have monetary value (as recyclable materials) shall be segregated from materials designated as waste.
9. Management, transportation, and disposal of waste shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.

B. Other Jobsite Piping System Removal

1. Sanitary and Storm Water Systems
 - a. Onsite storm water catch basins, sanitary manhole structures, and associated piping shall be removed. Piping that extends beyond the Jobsite boundary shall be abandoned via concrete plug.

- b. All piping systems, whether to be eventually demolished and abandoned or remaining for future (i.e., outside of the Jobsite) use shall be protected to prevent debris, sediment, etc. from entering the system during demolition Work.
- C. Jobsite Piping System Protection
 - 1. Fire Suppression System
 - a. The Contractor shall place barricades around active hydrants within the City of Peoria right of way (if any) that may be exposed to equipment or haul trucks during the Work.
 - 2. Storm Water System
 - a. Storm water systems outside of the Jobsite boundary will remain for use following completion of Jobsite restoration Work.
 - b. The Contractor shall install and maintain control measures to prevent liquids, materials, asbestos fibers, dust, and other debris from entering storm water systems to remain. Liquids, materials, asbestos fibers, dust, and other debris entering storm water systems shall be collected, stored, managed, and transported offsite for disposal by the Contractor until these features are cleaned by the Contractor, at the Contractor's expense, to the Owner's satisfaction.

3.12 CONCRETE, BRICK, AND BLOCK

- A. The Contractor shall select and perform one of the following options for concrete and brick that is coated, painted, or otherwise visually observed to be stained:
 - 1. Transport and dispose the concrete, brick, and block offsite. The material shall be characterized, managed, transported, and disposed offsite as specified in Section 01 74 00 – Cleaning and Waste Management.
 - 2. Remove coatings, paint, or stained areas of concrete, brick, and block for the purpose of recycling the underlying concrete, brick, and block. Coating, paint, and staining shall be removed via blast media or other methods proposed by the Contractor and accepted by the Owner. When blast media is utilized, the Contractor shall perform the Work as specified in Section 01 74 00 – Cleaning and Waste Management.

3.13 ABOVE GRADE STRUCTURES AND FEATURES

- A. The school structure and shed located to the southwest of the school building shall be demolished. Structures and features shall be demolished via manual dismantlement demolition techniques. The basement of the school building and all foundations shall be removed in full.
- B. All pavement and other features within the Jobsite boundary shall be removed completely, with the exception of the following:

1. Trees
 2. Sidewalk along West Krause Avenue
 3. Driveway leading into the property from West Krause Avenue
 4. Any other item designated by the Owner
- C. Demolition shall be performed in accordance with these Technical Specifications and all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.
- D. All general floor debris shall be removed prior to demolition as specified.
- E. The Contractor shall inspect the structures for presence of animals and animal waste as specified in Section 02 00 00 – Existing Conditions.
- F. Control measures shall be installed and maintained to prevent spills, wash water, asbestos fibers, dust, and other demolition debris from being released to the ground surface and storm sewer systems.
- G. Demolition of above grade structures shall be performed in accordance with the Contractor’s submitted demolition Work plan.
- H. During demolition, debris shall be handled, managed, transported, and disposed offsite as specified in Section 01 74 00 – Cleaning and Waste Management. Materials that have monetary value (as recyclable materials) shall be segregated from materials designated as waste.

3.14 NOISE AND AIR MONITORING

- A. Noise Monitoring
1. The Contractor shall setup and operate noise measuring devices to assess and monitor noise generated during the Work. Requirements for the monitoring include, but are not limited to, the following:
 - a. One device shall be placed on each side (north, south, east, west) of the Jobsite boundary fence
 - b. Devices shall be calibrated as required by the device manufacturer
 - c. Locations of monitors shall be indicated on a Jobsite map included in the demolition Work plan
 - d. Noise data shall be submitted to the Owner on a weekly basis
- B. Air Monitoring
1. In addition to air monitoring specified herein to determine appropriate safety and personal protective measures to be implemented for worker safety and dust particulate monitoring specified in Section 01 56 16 – Dust and Odor Controls, the Contractor shall perform additional air monitoring as follows during demolition Work:

- a. Collect air samples on each side (north, south, east, west) of the Jobsite boundary fence once per week when demolition Work is actively being performed
- b. Analyze air samples for the following:
 - i. Beryllium
 - ii. Cadmium
 - iii. Lead
 - iv. Mercury
 - v. Silica
 - vi. Asbestos
- c. Samples shall be submitted to an Owner-approved accredited laboratory under USEPA chain-of-custody procedures
- d. Analytical results shall be submitted to the Owner following receipt from the laboratory

3.15 RECYCLABLE MATERIAL RECOVERY

- A. Demolition Work is to be performed in a manner that minimizes waste and maximizes recycling of materials. Recyclable materials may include, but are not limited to, the following:
 1. Electrical equipment, such as panels, and wire and cable conduit
 2. Piping and associated materials, such as valves and supports
 3. Specialty metals
 4. Structural steel
 5. Miscellaneous steel / metals, such as enclosures, flashing, roofing, and other cold-rolled materials
 6. Concrete, brick, and block (only that is not painted or coated and has no visual evidence of staining)
 7. Concrete reinforcing steel (i.e., rebar)
- B. When removed, materials of monetary value shall be managed and stored separately from materials designated as waste.
- C. Building materials that are eligible for recycling but contain staining or evidence of contamination shall be segregated for offsite disposal at an Owner-approved disposal facility.
- D. Recyclable material shall be handled, managed, transported and recycled offsite as specified in Section 01 74 00 – Cleaning and Waste Management.

3.16 DEMOLITION / REMOVAL WASTE HANDLING

- A. During demolition, waste shall be handled, managed, transported, and disposed offsite as specified in Section 01 74 00 – Cleaning and Waste Management. Materials that have monetary value (as recyclable materials) shall be segregated from materials designated as waste.

- B. Coated, painted, stained or otherwise contaminated concrete, brick, and block shall be segregated from general demolition debris and concrete, brick, and block designated for recycling. Coated, painted, stained or otherwise contaminated concrete, brick, and block shall be characterized, transported, and disposed offsite as specified in this Section.
- C. Demolition / removal waste shall be managed at the Jobsite until waste characterization data is received, if required, and / or arrangements for transportation and offsite disposal are made. Demolition waste of different types shall be managed and transported separately as required by the Owner and offsite disposal facility.
- D. Demolition / removal waste may be placed in covered roll-off containers or stockpiled based on quantity of materials to be removed. Roll-off containers and stockpiles shall be staged at locations as approved by the Owner and shall be located away from storm drains.
- E. Materials placed in roll-off containers shall be covered when not in use to minimize the generation of fugitive dust and odors and prevent storm water from coming in contact with materials.
- F. Stockpiling shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.

3.17 WASTE CHARACTERIZATION

- A. Waste characterization and labeling shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.

3.18 LABELING

- A. Waste and recyclable materials shall be labeled as specified in Section 01 74 00 – Cleaning and Waste Management.

3.19 TRANSPORTATION AND DISPOSAL / RECYCLING

- A. Transportation and disposal / recycling shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.

3.20 DECONTAMINATION

- A. Decontamination shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.

3.21 JOBSITE RESTORATION

- A. Excavations and other below grade features shall be backfilled, and all disturbed areas graded as specified in Section 31 20 00 – Earthwork. Seeding shall be performed as specified in Section 32 92 19 – Seeding.

3.22 INSPECTIONS

- A. The Contractor shall perform daily structural safety inspections until demobilization from the Jobsite.
- B. Additional requirements for inspections are outlined in Section 01 41 00 – Regulatory Requirements and Section 01 74 00 – Cleaning and Waste Management.

END OF SECTION

SECTION 02 82 00 – ASBESTOS ABATEMENT

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. The Contractor shall supply all labor, equipment, materials, services, personal protective equipment (PPE), and insurance necessary to abate all known and newly discovered asbestos-containing materials (ACMs) at the Jobsite and dispose the materials in accordance with these Technical Specifications and all applicable Federal, State, local laws, ordinances, codes, rules, regulations, and industry standards applicable to the Work.
- B. A *Pre-Demolition Site Characterization* survey was performed in March 2022 and is provided in Appendix A. As detailed in survey, non-friable materials in good condition such as floor tile and mastic and cove base and mastic were identified as ACM as well as friable or likely to become friable materials such as thermal system insulation (TSI) pipe and joint fittings and floor felt paper. There is significant damage in some areas of the building. As such, some additional suspect ACMs are expected to be present at the Jobsite. The Contractor is responsible for identifying, abating, transporting, and disposing of ACM listed in the provided report and all others discovered during the asbestos abatement / demolition Work as part of the Work.
- C. Building materials (i.e. transite wall panels and roofing) that are not clearly confirmed to be non ACM shall be treated as suspect ACM and included in the Contractor's asbestos abatement Work until such time the suspect ACMs are properly characterized by the Contractor to confirm / deny they contain asbestos. Suspect ACM is any material that has not been properly sampled and analyzed by a certified laboratory that may contain asbestos, except for wood, glass, metal, and exterior building brick.
- D. Dust and Debris
1. Significant amounts of dust and damaged building materials (debris) are on floor or other surfaces throughout the building. Some of the damaged building materials on floor or other surfaces are ACM or contaminated with ACM. All dust and damaged building materials shall be removed / abated, managed, transported, and disposed of as ACM waste unless, in the opinion of the Owner, the following can be shown:
 - a. Building materials can be decontaminated and sampling confirms ACMs have been abated, with dust and pulverized materials still removed as ACM waste
 - b. Sampling confirms ACMs are not present on intact building materials or debris on surfaces located within the area where dust and debris is present
 2. All porous materials (e.g., fiberglass insulation or carpet) that, at the sole discretion of the Owner, cannot be decontaminated that are in contact with deteriorated building materials shall be abated, managed, transported, and disposed of as ACM.
 3. It is important to note that PCBs have been detected in paint of various colors throughout the structure, with a sample of one color at a concentration of 50 parts per million (ppm) and the remaining samples at concentrations less than 50 ppm.

The Toxic Substances Control Act (TSCA) limit for PCBs is 50 ppm. A composite sample of various paint colors indicated lead at a toxicity characteristic leaching procedures (TCLP) concentration of 17 ppm, exceeding the hazardous waste limit 5 ppm. Paint throughout the structure is observed to be flaking and paint chips are present on ground surfaces, mixed with dust and other debris. The Contractor is to remove PCB- and / or lead-containing paint prior to performing demolition as specified in Section 02 41 00 – Demolition and removal will require coordination with ACM abatement Work.

- E. As part of the performance of the Work, the Contractor shall:
1. Prepare and submit to the Owner an Asbestos Work plan as specified in Section 01 35 13 – Special Project Procedures.
 2. Prepare and submit to the Owner for review, prior to submitting to the regulatory agency, the *State of Illinois Demolition/Renovation/Asbestos Project Notification* form as required by the Illinois Environmental Protection Agency (EPA). Upon review and approval by the Owner, the Contractor shall submit the notification electronically, along with the appropriate fee.
 - a. A copy of this notification shall be kept onsite and made readily available if requested by a regulatory agent.
 3. Determine when Work involves the abatement of ACM and conditions that require conformance with specified regulatory / legal requirements for asbestos.
 4. Remove regulated materials present within planned abatement enclosures, if any, prior to commencing abatement of asbestos or protect regulated materials via critical barriers.
 5. Setup, install, and maintain necessary scaffolding, enclosures, including safety signage, to control access to areas of Work and prevent migration of asbestos beyond enclosures.
 6. Utilize procedures, including dust suppressants and equipment required to limit occupational and environmental exposure to asbestos during the performance of the Work.
 7. Perform personal air monitoring and onsite analysis for all Contractor and Subcontractor workers in accordance with Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work and the Contractor's air monitoring program.
 8. Perform intrusive Work as necessary to open intact areas where ACMs may be present but have not been previously sampled extensively, such as insulations or piping behind walls, etc., and perform sampling and analysis.
 9. Abate all ACMs as specified. If in the opinion of the Contractor ACM cannot be abated prior to building demolition, the Contractor shall provide documentation to the Owner including, but not limited to, the following items. The Owner reserves the right of refusal to the Contractor's request.
 - a. A map showing the location(s) of the ACM that cannot be abated prior to demolition
 - b. An explanation to why the ACM cannot be abated prior to demolition
 - c. An asbestos management plan to protect the ACM during demolition and how the ACM will be abated post demolition

- d. Level of communication with all workers involved with the demolition and post asbestos abatement activities
 - e. An approved variance from all applicable Federal, State, and / or local regulatory agencies in writing that indicates the ACMs can be abated following demolition
10. If the Contractor chooses to collect bulk asbestos samples from any newly discovered suspect ACMs and / or presumed ACM (PACM) / assumed ACMs, the Contractor shall provide a Illinois Department of Public Health (IDPH) licensed asbestos inspector to categorize and collect the bulk samples in general accordance with the Asbestos Hazard Emergency Response Act (AHERA). The suspect ACM shall be categorized into miscellaneous material (MM), surfacing material (SM), or thermal system insulation (TSI). The number of samples shall be those required by all applicable Federal, State, local laws, ordinances, codes, rules and regulations, and industry standards applicable to the Work to adequately confirm the presence or absence of asbestos in building materials, but at a minimum will be two samples from each MM, 3-5-7 Rule from each SM, and three samples from each TSI. An Owner's representative shall be present when all samples are collected. The Contractor shall not collect samples without prior approval from the Owner. Samples collected without an Owner's representative present or without the authorization of the Owner shall be rejected. Samples shall be submitted to an Owner-approved accredited laboratory under chain-of-custody procedures.
11. If asbestos is present in building materials at greater than 0% concentration, the Contractor shall manage, containerize, store, transport, and dispose of the material as ACM at an Owner-approved facility licensed to handle the materials.
12. To the extent practicable, the Contractor shall abate asbestos from materials with monetary value (as recyclable materials), such as metal piping and structural members. The Contractor shall perform necessary sampling and provide documentation to the Owner to demonstrate that ACM has been fully removed from recyclable materials and the materials meet the recycling facility's permitted handling procedures. Scrap materials shall be managed as specified in Section 02 41 00 – Demolition.
13. The Contractor shall manage, containerize, and store sampled suspect ACM at the Jobsite as ACM until asbestos characterization results are received and reviewed to determine if the suspect ACM is ACM.
14. The Contractor shall manage, containerize, store, transport, and dispose ACM at an Owner-approved facility licensed to handle the materials as characterized by the sample data. The Contractor is responsible for the proper waste labeling and placarding for the waste from the time the waste is generated to the time it is received by the destination facility. The Contractor must provide completed waste manifests as specified in Section 01 74 00- Cleaning and Waste Management.
- F. The Contractor's asbestos abatement supervisor and workers shall be licensed by IDPH and have appropriate fit-testing and medical monitoring. The Contractor shall be licensed by IDPH for abatement and shall implement and monitor all health and safety measures and controls related to removal of ACM and review all collected data. The Contractor's asbestos abatement supervisor shall be responsible for entering into asbestos regulated areas to complete these responsibilities.

- G. The abatement, management, transportation, and disposal of ACM materials shall be performed in accordance with these Technical Specifications and all applicable Federal, State, local laws, ordinances, codes, rules and regulations, and industry standards applicable to the Work.
- H. The Work described in this Specification is a general description and is not intended as a complete listing of the Work to be accomplished. The Work of this project may be expanded or deleted above and beyond the specified scope by the Owner.

1.2 ABBREVIATIONS AND DEFINITIONS

- A. Abbreviations and definitions relevant to the asbestos abatement Work include the following:
 - 1. *Abatement*: Procedures including removal, enclosure, repair, demolition, and renovation to control fiber release from asbestos-containing materials.
 - 2. *Abatement contractor (AC)*: The entity responsible for performing the Work in the specifications and has the training and accreditation to competently perform the abatement work. This entity shall have IDPH licenses required for the Work as specified.
 - 3. *Asbestos abatement supervisor (Supervisor)*: Any person who supervises asbestos abatement workers. This person must be trained, accredited, and meet OSHA competent person criteria (see below) for asbestos abatement.
 - 4. *ACM – Asbestos-containing material*: Any material containing more than one percent asbestos as defined under NESHAP 40 Code of Federal Regulations (CFR) 61 and OSHA 29 CFR 1926.1101, or at least one percent asbestos.
 - 5. *Aerosol*: A system consisting of particles, solid or liquid, suspended in air.
 - 6. *Airlock*: A system for permitting ingress and egress with minimum air movement between a contaminated area and an uncontaminated area, typically consisting of two curtained doorways separated by a distance of at least three feet.
 - 7. *Air monitoring*: The process of measuring the fiber content of a known volume of air collected during a specific period of time.
 - 8. *Amended water*: Water to which a surfactant has been added in order to accomplish more thorough penetration and saturation of the ACM.
 - 9. *Asbestos*: The mineral varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite (amosite), anthophyllite, actinolite and tremolite. For purposes of determining respiratory and worker protection, both the asbestiform and non-asbestiform varieties of the above minerals and these minerals that have been chemically treated and / or altered shall be considered as asbestos.
 - 10. *Air sampling firm*: A professional firm providing specialized services by trained and certified or qualified personnel in the field of asbestos abatement and project management, contracted with or employed by the Contractor to supervise and / or conduct inspection, monitoring, and analysis services.
 - 11. *Breathing zone*: A hemisphere forward of the shoulders with a radius of approximately 6 to 9 inches.
 - 12. *Bridging encapsulant*: The application of a sealant over the surface of ACM to prevent the release of asbestos fibers.

13. *CIH – Certified Industrial Hygienist:* An industrial hygienist certified in the Comprehensive Practice or Chemical Aspects of Industrial Hygiene by the American Board of Industrial Hygiene.
14. *Class I asbestos work:* Activities involving the removal of thermal system insulation or surfacing ACM or presumed ACM.
15. *Clean room:* An uncontaminated area or room, which is a part of the worker decontamination enclosure system with provisions for storage of worker's street clothes and clean protective equipment.
16. *Competent person:* One who is capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, who has the authority to take prompt corrective measures to eliminate them, as specified in 29 CFR 1926.32(f). In addition, for roofing materials (considered Class II work) who is specially trained in a training course which meets the criteria of EPA's Model Accreditation Plan (40 CFR 763) for supervisor, or its equivalent.
17. *Containment:* An enclosure system.
18. *Contractor:* The individual or business that holds a current IDPH license and with which the Owner contracts with to perform the asbestos abatement.
19. *Curtained doorway:* A device to allow ingress or egress from one room to another typically constructed by placing two overlapping sheets of plastic over an existing or temporarily framed doorway.
20. *Cutting:* To penetrate with a sharp-edged instrument and includes sawing, but does not include shearing, slicing, or punching.
21. *Differential pressure system:* A containment system utilizing negative air machines in an airtight enclosure.
22. *Disposal bag:* Plastic bags, 6-mil thick and leak-tight plastic bags used for transporting asbestos waste from the Work Jobsite and to the disposal facility. Each shall be labeled in accordance with Illinois standards.
23. *Encapsulant:* A material which is applied to ACM to reduce or control the potential release of asbestos fibers from the material, either by creating a membrane over the surface (bridging encapsulant), or by penetrating into the material and binding its components together (penetrating encapsulant).
24. *Encapsulation:* The application of an encapsulant to ACM in accordance with the manufacturer's specifications.
25. *Enclosure:* A semi-air tight system used to segregate and isolate an asbestos abatement area, and which is continuously served by a negative pressure ventilation system once abatement activities start.
26. *Equipment room:* An area or room which is part of the worker decontamination enclosure system with provisions for storage of contaminated clothing and equipment.
27. *Excursion limit:* The maximum personal exposure concentration of asbestos fibers in air for any 30-minute period (1.0 fiber per cubic centimeter).
28. *Exposure assessment:* A demonstration by the employer that employee exposure during an operation is or will be consistently below the personal exposure limits set by OSHA.
29. *Facility:* Any institutional, commercial, public, industrial, or residential structure, installation, or building.

30. *Filter*: A media component used in respirators or equipment to remove solid or liquid particles from air or water.
31. *Fixed object*: A piece of equipment or furniture that cannot be removed from the Work area.
32. *Friable asbestos material*: Any material containing more than one percent asbestos as determined using the method specified in Subpart F, 40 CFR 763, Section 1, Polarized Light Microscopy, that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10 percent as determined by a method other than point counting by polarized light microscopy, verify the asbestos content by point counting using polarized light microscopy.
33. *Friable upon removal*: A non-friable material, which becomes friable when disturbed during removal.
34. *Fugitive source*: Any source of emissions not controlled by an air pollution control device.
35. *Glovebag technique*: A method for removing small amounts of friable ACM from fireproofed beams; heating, ventilation, and air conditioning system ducts; short piping run; valves; joints; elbows; and other non-planar surfaces in a non-contained (plasticized) Work area. The glovebag assembly is a manufactured or fabricated device consisting of a bag (typically constructed of plastic), two inward projecting long sleeve gloves, an internal tool pouch and an attached or pre-printed label. All workers who are permitted to use the glovebag technique shall be trained, experienced and skilled in this abatement method.
36. *Grinding*: To reduce to powder or small fragments and includes mechanical chipping or drilling.
37. *HEPA*: High efficiency particulate air.
38. *HEPA filter*: A high efficiency particulate air filter capable of removing particles greater than 0.3 microns in diameter with 99.97 percent efficiency using dioctyl phthalate testing methodology.
39. *HEPA vacuum*: A vacuum system equipped with HEPA filtration.
40. *HEPA machine*: Negative air machine equipped with HEPA filtration.
41. *IDPH*: Illinois Department of Public Health.
42. *Leak-tight*: Solids or liquids cannot escape or spill out. It also means dust-tight.
43. *Malfunction*: Any sudden and / or unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner so that emissions of asbestos are increased. Failures of equipment shall not be considered malfunctions if they are caused in any way by poor maintenance, careless operation, or any other preventable upset conditions, equipment breakdown, or process failure.
44. *Material decon unit*: A decontamination system, which is utilized for transferring containerized waste from inside to outside of the Work area.
45. *Materials that contain less than one percent asbestos*: A material that has been determined by testing to contain greater than 0 percent but less than one percent asbestos. Materials that contain less than one percent asbestos are not regulated as ACMs by the US Environmental Protection Agency (USEPA), the Illinois EPA or the IDPH. Work that disturbs such materials, however, is still regulated as asbestos under OSHA.

46. *Movable object*: A piece of equipment or furniture in the Work area, which can be removed from the Work area.
47. *Mudded pipe insulation section*: A continuous section of pipe insulation less than 12 inches in length, which may contain one or more plumbing fitting(s) such as elbows, tees, valves, "y's", unions, etc.
48. *NAM – Negative air machine*: A specially designed fan mounted in a cabinet that draws air from the contaminated space into pre-filters and a HEPA filter.
49. *Negative pressure*: Air pressure lower than surrounding areas, generally caused by exhausting air from within the containment Work area. A sufficient volume of air shall be exhausted to create a minimum pressure of negative 0.02 inches of water within the enclosure with respect to the area outside of the containment Work area.
50. *Negative pressure enclosure*: The negative pressure / local exhaust system, utilizing HEPA filtration capable of maintaining a negative pressure of 0.02 inches of water inside the Work area and a minimum of four air exchanges per hour from adjacent areas into the Work area and exhausting clean, filtered air outside Work area.
51. *Negative pressure respirator*: A respirator in which the air pressure inside the respirator is negative during inhalation in relation to the air pressure outside the respirator.
52. *Non-friable ACM*: Any material containing more than one percent asbestos as determined using the method specified in Subpart F, 40 CFR 763, Section 1, Polarized Light Microscopy, that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
53. *OSHA*: Federal Occupational Health and Safety Administration
54. *Outside air*: The air outside building, structure, negative air enclosure, containment or designated regulated area.
55. *Owner or operator of a demolition or renovation activity*: Any person who owns, leases, operates, controls, or supervises the facility being demolished or renovated or any person, who owns, leases, operates, controls, or supervises the demolition or renovation operation or both.
56. *PCM – Phase Contrast Microscopy*: laboratory method of estimating the presence of asbestos fibers based on fiber width to length ratio in air samples.
57. *PPE – Personal protective equipment*: Personal protective equipment necessary to perform Work relating to asbestos abatement and inspection which includes but is not limited to coveralls, hoodies, booties, respirators, respirator filter cartridges, and gloves.
58. *PACM – Presumed Asbestos-Containing Material*: Any suspect ACM that has been evaluated by a competent person and deemed to contain asbestos. Only sample analysis by a qualified laboratory can deny or confirm if PACM is asbestos containing material.
59. *Particulate asbestos material*: Finely divided particles of asbestos or material containing asbestos.
60. *Penetrating encapsulant (lock-down)*: Liquid material applied to ACM to control airborne fiber release by penetrating into the material and binding its components together.
61. *Personnel monitoring*: Sampling the asbestos fiber concentrations within the breathing zone of an employee during representative operations as required by applicable regulations.

62. *PLM – Polarized Light Microscopy*: Optical microscopy involving polarized light for the purpose of identifying, classifying, and quantifying asbestos-like fiber concentrations in a bulk material sample using method EPA/600/R-93/116.
63. *Protection factor*: The ratio of the ambient concentration of an airborne substance to the concentration of the substance outside the respirator to the concentration inside the respirator at the breathing zone of the wearer.
64. *Prior experience*: Experience required of the Contractor on asbestos projects of similar nature and scope to ensure the capability of performing asbestos abatement in a satisfactory manner. Similarities shall be in areas related to material composition, project size, abatement methods required, number of employees and the engineering, work practice and personal protection controls required.
65. *Regulated area*: An area established by the Contractor to demarcate areas where airborne concentrations of asbestos exceed, or can reasonably be expected to exceed the permissible exposure limits. The regulated area may take the form of (a) a temporary enclosure, as required by Illinois OSHA, or (b) an area demarcated in any manner that minimizes the number of employees exposed to asbestos.
66. *Regulated ACM*: (a) Friable asbestos material, (b) Category I non-friable ACM that has become friable, (c) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting or abrading, or (d) Category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this subpart.
67. *Removal*: To take off ACM from surfaces or components of a facility.
68. *Renovation*: Altering a facility or one or more facility components in any way, including the stripping or removal of ACM from a facility component. Operations in which load-supporting structural members are wrecked or taken out are demolitions.
69. *Respirator*: A device designed to protect the wearer from the inhalation of harmful atmospheres.
70. *SDS – Safety data sheets*: Required by OSHA for any chemical in the workplace that that could be expected to cause an exposure to workers during normal use or in emergency situations.
71. *Shower room*: A room between the clean room and the equipment room within the worker decontamination system supplied with hot and cold running water controllable at the tap, adequate soap and suitably arranged for complete showering.
72. *Staging area*: Either the holding area or some areas near the waste transfer airlock where containerized asbestos waste has been placed prior to removal from the Work area.
73. *Structural member*: Any loaded-bearing member of a facility, such as beams and load-bearing walls or any non-load supporting member, such as ceilings and non-load supporting walls.
74. *Surfactant*: A chemical wetting agent added to water to improve penetration.
75. *Suspect ACM*: any material that does not meet the definition of PACM but is suspected to contain asbestos because the material is not wood, glass, metal, or plastic. Suspect ACM should be evaluated by a competent person.
76. *TEM – Transmission Electron Microscopy*: Laboratory method of identifying asbestos fibers using 20,000x magnification or greater in air samples.

77. *Time weighted average*: The average exposure to a contaminant in air measured during a specific time period, usually a shift, adjusted to eight hours.
78. *Visible emissions*: An emission containing particulate asbestos material that is visually detectable without the aid of instruments. This does not include condensed uncombined water vapor.
79. *Waste generator*: Any owner or operator of a source covered by US Department of Transportation (USDOT) regulations whose act or process produces asbestos-containing waste material. All demolition debris materials, including ACM, except those containing substances classified as hazardous or dangerous by controlling Federal, State, or local regulatory agencies, shall upon their demolition become the property of the Contractor.
80. *Waste shipment record*: The shipping document, required to be originated and signed by the waste generator, used to track and substantiate the disposition of asbestos-containing waste material.
81. *Wet cleaning*: The process of eliminating asbestos contamination from building surfaces and objects by using cloths, mops, or other cleaning utensils which have been dampened with water and afterwards thoroughly decontaminated or disposed of as asbestos contaminated waste.
82. *Work*: The obligations of the Contractor under the Contract Documents. Work includes, unless specifically excepted by the Contract Documents, the furnishing of all materials, labor, equipment, supplies, plant, tools, scaffolding, transportation, supervision, permits, inspections, occupancy approvals, insurance, taxes, and all other services, facilities and expenses necessary for the full performance and completion of the requirements of the Contract Documents.
83. *Work area*: Designated rooms, spaces, or areas of the project in which asbestos abatement actions are to be undertaken or which may become contaminated as a result of such abatement actions.
84. *Worker decontamination system*: A series of connected rooms, consisting of a clean room, a shower room and an equipment room separated from each other and from the Work area by curtained doorways. This system is used for all worker entries and exits from the Work area.

1.3 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
 1. Section 01 32 00 – Project Controls Requirements
 2. Section 01 33 00 – Submittal Procedures
 3. Section 01 35 13 – Special Project Procedures
 4. Section 01 41 00 – Regulatory Requirements
 5. Section 01 54 00 – Construction Aids
 6. Section 01 56 00 – Barriers and Enclosures
 7. Section 01 74 00 – Cleaning and Waste Management
 8. Section 02 00 00 – Existing Conditions
 9. Section 02 41 00 – Demolition
 10. Section 02 83 00 – Lead Control and Removal

11. Section 02 84 00 – PCB-Containing Material Removal
 12. Section 02 87 00 – Nonhazardous and Hazardous Waste Removal
 13. Section 02 88 00 – Universal Waste Removal
- B. Work outlined in this Section shall be performed in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. References to regulatory requirements are included in Section 01 41 00 – Regulatory Requirements.
- C. A collection of Jobsite Drawings is included in Appendix B to provide the Contractor details of buildings, locations, utilities, and details on other Jobsite features. Appendix B may not contain all pertinent details needed by the Contractor to perform the Work. It is the responsibility of the Contractor to request additional Drawings; however, due to the age of the school, additional Drawings may not be available. Details on structures and locations of underground utilities and structures shown on the Drawings are provided “as is” and it is not to be inferred that the details and locations shown are precise or that all existing conditions are depicted. It is the Contractor’s responsibility to verify details and locations shown prior to performing the Work.
- D. All Work shall be done in strict accordance with all applicable Federal, State, local laws, ordinances, codes, rules, regulations, and standards governing asbestos abatement and in accordance with industry standards. This includes any other Work, including trade Work conducted in conjunction with the project.

1.4 SUBMITTALS

- A. Work to be performed to complete asbestos abatement shall be outlined in appropriate Work plans specified in Section 01 35 13 – Special Project Procedures. The asbestos Work plan shall be prepared by an asbestos contractor supervisor licensed by IDPH.
- B. Permits and notifications shall be submitted as specified in Section 01 35 13 – Special Project Procedures.
- C. Work performed during asbestos abatement shall be summarized in the weekly progress report, as specified in Section 01 32 00 – Project Controls Requirements, and in the construction summary report, as specified in Section 01 35 13 – Special Project Procedures.
- D. ACM sampling summary reports, as specified herein.
- E. A remaining ACM summary report that summarizes below grade ACMs left-in-place (if any), as specified in Section 01 35 13 – Special Project Procedures.
- F. Completed inspection forms, including, but not limited to:
- a. Contractor certification of visual inspection. The Contractor shall provide and complete a designated inspection form for each abatement enclosure, if any, that certifies surfaces including pipes, beams, ledges, walls, permanent machinery / equipment, ceiling, floor, decontamination unit, etc. were visually found to contain no asbestos dust, debris, or residue. The form shall be completed by the

Contractor's asbestos abatement supervisor and shall include a description of the enclosure area, quantity of asbestos removed, date and time of inspection, and signature and training certification number of the asbestos abatement supervisor. The inspection form shall also include requested dates for visual inspection by the Owner prior to commencement of clearance air monitoring.

- G. Daily safety reports, upon request.
- H. Regulated area (i.e., negative pressure enclosures and other designated asbestos abatement areas) login / logout documents, upon request.
- I. Daily continuous read strip readings for each operating manometer upon request (if applicable).
- J. Completed inspection forms and waste inventories shall be included in the weekly progress report, as specified in Section 01 32 00 – Project Controls Requirements.
- K. Submittals associated with analytical for waste characterization and profiling and waste transportation and disposal documentation (e.g., waste manifests) is specified in Section 01 74 00 – Cleaning and Waste Management.
- L. Submittals associated with analytical for personal air monitoring data shall be submitted to the Owner at a minimum weekly basis for review and comment.
- M. Submittals shall be submitted as specified in Section 01 33 00 – Submittal Procedures.

1.5 QUALITY CONTROL

- A. The Contractor shall provide OSHA compliance air monitoring to determine exposures to its employees in accordance with OSHA 29 CFR 1926.1101. Frequency of monitoring shall comply with OSHA requirements for the anticipated and actual exposure levels. The Contractor shall provide a written exposure assessment with air sampling and analysis conducted six months or less prior to the start of the Work to determine the requirements for respiratory protection and frequency of OSHA monitoring for each type of activity. The Contractor should note that a negative exposure assessment (NEA) may be possible for these tasks. Analyses may be performed onsite. Credentials are required for testing and analysis of phase contrast microscopy air samples. Air sampling shall be conducted by an IDPH licensed air sampling professional accredited by AIHA or AAR; or participation in the Proficiency Analytical Testing (PAT) program.
- B. The Contractor shall perform air monitoring and final clearance air monitoring for each regulated area as required.

PART 2 – PRODUCTS

2.1 EQUIPMENT

- A. The Contractor shall provide power, operate, control, and maintain all equipment necessary for the performance of the Work. Equipment shall be operated and maintained in accordance with manufacturer's recommendations and requirements.
- B. If negative pressure enclosures are required, the Contractor shall supply a sufficient quantity of negative pressure ventilation units equipped with HEPA filtration. Units shall be operated in accordance with American National Standards Institute (ANSI) 29.2-79 and USEPA guidance document EPA 560 / 5 83-002.

2.2 MATERIALS

- A. The Contractor shall provide all necessary materials to perform the Work. Materials shall be delivered to the Jobsite; handled, stored, and protected; and utilized as specified by manufacturer's recommendations and requirements.
- B. Enclosure materials shall be fire-retardant and conform to National Fire Protection Association (NFPA) 701-04 and ASTM International (ASTM) E84 and applicable local fire codes. The enclosures shall be constructed of materials such that when the enclosure is completed there is limited potential for impact damage to the enclosure and no potential for fiber release.
- C. Polyethylene sheeting for enclosure floors, walls, and coverage for stationary objects shall be a minimum of 6-mil thick fire-retardant sheeting. Polyethylene sheeting shall be used in widths selected to minimize the frequency of seams. All polyethylene sheeting joints shall overlap at a minimum of 6 feet and be sealed.
- D. Encapsulation materials shall be the penetrating type and conform to the following characteristics:
 - 1. Should not be solvent-based or utilize a vehicle consisting of hydrocarbons
 - 2. Shall be non-flammable
- E. Surfactant shall be a 50 / 50 mixture of polyethylene ester and polyoxyethylene ester, or equivalent, mixed in a proportion of one fluid ounce to five gallons of water as specified by manufacturer.

2.3 CONTAINERS AND PACKAGING

- A. Disposal drums shall be metal or fiberboard with locking ring tops and labeled in accordance with USEPA regulation 40 CFR 61.150(a)(i)(iv)(v). All disposal drums shall maintain structural integrity during the time waste is first placed into the drum and transported and disposed at the licensed disposal facility.

- B. Disposal bags shall be 6-mil polyethylene, pre-printed with labels as required by USEPA regulation 40 CFR 61.150(a)(i)(iv)(v).
- C. Labels shall be affixed to the exterior of all bags, polyethylene sheeting, and containers used to store asbestos waste (including asbestos contaminated disposable PPE). The labels shall be legible and visible and meet the requirements established in 29 CFR 1926.1101(k)(8).

2.4 SAFETY AND SIGNAGE

- A. The Contractor shall provide all materials, equipment, PPE, facilities, and personnel required to perform the Work in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations, and industry standards applicable to the Work.
- B. The Contractor shall provide and install safety signage for workers as required by OSHA and IDPH. The Contractor shall provide and install signage for labor and hazard requirements including but not limited to lunchroom, storage areas, waste containers, and transportation vehicles as required by all applicable Federal, State, local laws, ordinances, rules, regulations and codes applicable to the Work.
 - 1. The warning signs as required in 29 CFR 1910.1101(k)(7) shall bear the following information:

DANGER ASBESTOS MAY CAUSE CANCER CAUSES DAMAGE TO LUNGS AUTHORIZED PERSONNEL ONLY

- 2. The warning signs as required in 29 CFR 1910.1101(k)(7) that require respirator use shall bear the following information:

DANGER ASBESTOS MAY CAUSE CANCER CAUSES DAMAGE TO LUNGS AUTHORIZED PERSONNEL ONLY WEAR RESPIRATORY PROTECTION AND PROTECTIVE CLOTHING IN THIS AREA

- C. Full body disposable protective clothing, including head, body and foot coverings consisting of material impenetrable by asbestos fibers (Tyvek or equivalent) shall be provided to all workers and authorized visitors in sizes adequate to accommodate movement without tearing. Only single-use, disposable clothing shall be used, unless otherwise authorized by the Owner.
- D. Additional safety and fall protection equipment as necessary shall be provided to all workers and authorized visitors including, but not limited to the following:

1. Hard hats meeting the requirements of ANSI Standard Z89.1 1981
2. Eye protection meeting the requirements of ANSI Standard Z87.1 1979
3. Safety shoes meeting the requirements of ASTM standards F 2412, Test Methods for Foot Protection, and F 2413, Specification for Performance Requirements for Protective Footwear
4. Personal fall arrest systems meeting the requirements of ANSI / American Society of Safety Engineers (ASSE) Z359.1-2016
5. Disposable polyvinyl chloride (PVC) gloves

PART 3 – EXECUTION

3.1 NOTIFICATIONS

- A. The Contractor shall notify the Illinois EPA of planned Work at least ten working days prior to the start of asbestos related Work as detailed in Part 1.B of this Section. The Contractor shall provide the appropriate details and complete an *Asbestos Notification of Demolition and Renovation* form for the Owner to review before submittal to the State of Illinois. The Contractor shall provide the Owner copies of the notification confirmation of receipt if provided.
- B. The Contractor shall notify the Owner of planned Work up to 21 days prior to commencing Work. Work shall not begin until authorized by the Owner and required notifications to appropriate regulatory agencies have been made.
- C. The Contractor shall notify the Owner immediately if unexpected suspect ACM is discovered during any phase of the Work. Materials that are suspect ACM shall be handled and treated as ACM until they are properly characterized.
- D. It is the responsibility of the Contractor to coordinate the presence of regulatory agency and / or local municipal representatives for Work where a representative shall be present to perform an inspection. The Contractor shall notify the Owner immediately when regulatory agency and / or local municipal representatives are scheduled to be present at the Jobsite. The Owner shall attend all regulatory agency Jobsite meetings and / or inspections as the Owner deems necessary.

3.2 EXISTING CONDITIONS

- A. The Contractor shall evaluate existing conditions in areas of Work as specified in Section 02 00 00 – Existing Conditions to identify, evaluate, control, and mitigate hazards present or that may be encountered during the Work.
- B. Significant amounts of damaged building materials are on the floors throughout the building. Some of the damaged building materials on the floor are ACM or contaminated with ACM. All damaged building materials that are on the floor shall be abated, managed, transported, and disposed of as ACM waste, unless, in the opinion of the Owner, they can be decontaminated. All porous materials (e.g., fiberglass insulation or carpet) that, at the sole discretion of the Owner, cannot be decontaminated that are in contact with deteriorated building materials shall be abated, managed, transported, and disposed of as

ACM. The damaged building materials located on the floors may also be contaminated with lead- and / or PCB-containing paint.

- C. The Contractor shall remove / clean any remaining chemicals and other hazardous or nonhazardous materials present as needed to prevent release of materials during the Work. Materials shall be removed, characterized, handled, and disposed offsite as specified in Section 01 74 00 – Cleaning and Waste Management and in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.

3.3 BARRIERS AND ENCLOSURES

- A. The Contractor shall place barriers and control access to abatement Work areas. Work area accesses are to be restricted only to authorized, trained and protected personnel. These may include the employees of the Contractor, Contractor's Subcontractors, Owner; Owner's representatives, and Federal, State, and local inspectors. A list of authorized personnel shall be established by the Contractor prior to job start. With the exception of emergency response personnel, the Contractor shall approve visitors not listed prior to each restricted area entry.
- B. The Contractor shall post barrier tape and warning signs at the locations and approaches to a location where airborne concentrations of asbestos may be expected to exceed the pre-abatement concentration. Signs shall be posted at a distance sufficiently far enough away from the Work area to permit an employee to read the sign and take the necessary protective measures to avoid exposure. Additional signs may need to be posted following construction of Work place enclosures or barriers. Placement of these signs will be behind the construction barrier walls erected by the Contractor and shall not be placed in a location visible to the public outside of the project area. The barrier tape and warning signs shall meet the requirements established in 29 CFR 1926.1101(k)(7).
- C. Enclosure materials shall be fire-retardant and conform to the applicable local fire codes. The enclosures shall be constructed of materials such that when the enclosure is completed there is limited potential for impact damage to the enclosure and no potential for fiber release. Cladding of any type will not be considered an approved critical barrier for protecting underlying materials from potential asbestos fiber cross-contamination.
- D. Negative pressure enclosures, if required, shall be setup as follows:
 - 1. Verify shut down and lock out all heating, ventilation, and air conditioning (HVAC) components that are in, supply, or pass through the containment area, if possible. Seal all ducts and smoke test the containment before beginning abatement Work within the enclosure.
 - 2. Pre-clean all fixed objects / equipment / machinery that will remain in the enclosure area using HEPA filtered vacuums and / or wet cleaning techniques as appropriate. After pre-cleaning, enclose fixed objects in 6-mil polyethylene fire-retardant sheeting and seal securely in place with duct tape and a glue adhesive. If fixed objects / equipment / machinery cannot be enclosed to prevent contamination, the Contractor shall notify the Owner and provide a decontamination plan for each

- object / equipment / machinery that will not be enclosed with sheeting or dispose of the objects / equipment / machinery as ACM.
3. Seal off all windows, doorways, fan intake / exhaust, elevator openings, corridor entrances, drains, ducts and all other openings between the enclosure area and uncontaminated areas outside of the enclosure area including the outside of the building, tunnels and crawl spaces with 6-mil polyethylene fire retardant sheeting secured in place with duct tape and a glue adhesive.
 4. Cover floors in the containment area as follows:
 - a. Seal all floor drains and other floor openings inside the enclosure area with 6-mil polyethylene sheeting and duct tape prior to disturbing ACM and generating dust.
 - b. Polyethylene sheeting shall be sized to minimize seams. If the floor area necessitates seams, those on successive layers of sheeting shall be staggered to reduce the potential for water to penetrate to the flooring material. A distance of at least 6 feet between seams is required. Do not locate seams at wall / floor joints or cracks in the concrete flooring.
 - c. Floor sheeting shall extend to at least 12 inches up the sidewalls of the containment area and be secured in place with duct tape and a glue adhesive.
 - d. Sheeting shall be installed in a fashion so as to prevent slippage between successive layers of material.
 5. Cover walls in the containment area as follows:
 - a. Seal all openings in wall with critical barriers with 6-mil polyethylene sheeting and duct tape. Ensure airtight seal.
 - b. Each wall surface shall be covered with two layers of 6-mil polyethylene sheeting.
 - c. Plastic shall be sized to minimize seams. Seams shall be staggered and separated by a distance of at least 6 feet.
 - d. Wall sheeting shall overlap floor sheeting by at least 12 inches beyond the wall / floor joint to provide a better seal against water damage and for negative pressure.
 - e. Install two or more transparent plastic viewing ports in the walls of the enclosure in such a manner to allow unobstructed viewing of all components within the enclosure, which are involved in the project. Existing windows shall be utilized for viewing ports as needed. Movable curtains on the outside shall cover viewing ports.
 6. Worker decontamination areas shall be provided as follows:
 - a. Worker decontamination enclosure systems shall be provided for workers entering or exiting the containment area. The worker decontamination shall consist of a clean change room, a shower and an equipment room, each separated from each other and from the containment area by an airlock. The decontamination unit shall be constructed of metal, wood or plastic framing systems. A worker decontamination facility is required for any Class I asbestos Work involving greater than 25 linear feet or 10 square feet.
 - b. The worker decontamination enclosure systems constructed at the Work Jobsite shall utilize 6-mil opaque black or white polyethylene sheeting or other acceptable materials for privacy.

- c. The worker decontamination facility should be constructed contiguous to each negative pressure enclosure Work area or regulated area for Class I Work. Where construction contiguous to Work area is not feasible, the decontamination facility shall be constructed with a polyethylene-lined tunnel connecting the decontamination facility to the Work. The tunnel shall be constructed of materials that will protect from falling debris and asbestos fiber exposure (i.e., sustain negative air pressure).
 - d. Entry to and exit from all material decontamination chambers and decontamination enclosure systems shall be through curtained doorways consisting of two sheets of overlapping polyethylene sheeting. One sheet shall be secured at the top and left side, the other sheet at the top and right side. Both sheets shall have weights attached to the bottom to ensure that they hang straight and maintain a seal over the doorway when not in use. Inverted T double sheet doorway with a flap door is also acceptable. Alternative doorway designs providing equivalent protection and are deemed acceptable to the Owner may be utilized.
 - e. The clean room shall be sized to adequately accommodate the Work crew. Benches shall be provided as well as storage for employees' street clothes. Shelves for storing respirators shall also be provided in this area. Clean Work clothes (if required under disposables); clean disposable clothing, replacement filters for respirators, towels and other necessary items shall be provided in adequate supply at the clean room. A location for postings shall be provided in this area. Lighting, heat, and electricity shall be provided as necessary for comfort. Names and telephone numbers for all emergency response personnel shall be prominently posted.
 - f. The Contractor shall provide a standing mirror for each clean room constructed to provide workers an option to double check that their PPE is properly and completely worn.
 - g. The Contractor shall provide separate clean room and shower units for female workers or Owner's representatives, if applicable. The Contractor shall provide an adequate number of shower units per Class I enclosure to avoid overloading shower units during lunch breaks and end of shift exit procedures. A minimum of one shower unit per 10 workers inside containment is a reasonable estimate.
 - h. All decontamination water and shower wastewater will be collected and filtered through a filtration system before disposal. The filtration system shall consist of a series of filters and contain at least one 5 micron filter. Under no circumstances shall shower wastewater be reused for any reason.
 - i. Collected decontamination and shower wastewater shall be handled as specified in Section 01 74 00 – Cleaning and Waste Management.
7. The Contractor shall supply a sufficient quantity of NAMs equipped with HEPA filtration and pressure gauge.
- a. Each NAM shall have a three-stage filtration system consisting of a pre-filter, an intermediate filter, and a HEPA filter. The NAMs shall be operated and maintained in accordance with ANSI 29.2-79 and USEPA guidance document EPA 560 / 5 83-002.

- b. NAMs shall exhaust to exterior building locations only and be maintained to allow for constant exhaust flow for the duration of their use (i.e., prevent and repair physical damage and ice formation).
8. A fully operational negative air system shall be used for each negative pressure enclosure. The air pressure differential for each negative air system shall meet the following requirements:
- a. Continuously maintain a minimum of negative 0.02 column inches of water pressure differential as measured by dedicated differential pressure meters (manometers).
 - b. Supply a minimum of one air change every 15 minutes (or four air changes per hour). Determine the volume in cubic feet of the Work area by multiplying floor area by ceiling height. Determine total ventilation requirement in cubic feet per minute (CFM) for the Work area by dividing this volume by the air change rate.

$$\frac{\text{Volume of Work area (in cubic feet)}}{\text{Air exchange (in minutes)}}$$

The number of air units shall be based on the ventilation requirement in CFM divided by the capacity of the unit (in CFM) multiplied by 70 percent. If air-supplied respirators are utilized, estimate the volume of supplied air and add to Work place air volume when calculating ventilation requirements.

$$\frac{\text{[Total CFM]}}{\text{[Capacity of unit in CFM x 70 percent]}}$$

- c. A minimum of one back-up NAM for every four primary NAMs used. A minimum of one back-up NAM will be required if less than four primary NAMs are used. The back-up NAMs shall be of equal capacity to primary unit(s).
 - d. Large negative pressure enclosures may require additional NAMs to reduce dead zones and provide proper air flow throughout the enclosure.
 - e. For mini-enclosures and glove bags, a HEPA-filtered vacuum system shall be utilized to provide negative air pressure where applicable.
9. Manometers shall be installed and maintained as follows:
- a. The Contractor shall be responsible for providing, operating, and maintaining manometers in good working order for each negative enclosure at the Jobsite.
 - b. Manometers shall be a continuous read strip chart, or similar digital recording device.
 - c. The Contractor shall calibrate and maintain each manometer according to National Institute of Standards and Technology (NIST) and the manufacturer's recommendations. At a minimum, each manometer will be calibrated at the start of the project and annually thereafter until the project is completed unless NIST and / or manufacturer recommendations are more conservative. Each manometer shall be labeled or marked to display the most recent calibration date and calibrator initials. Copies of

- calibration logs will be provided to the Owner upon request. Each manometer exhibiting malfunctioning operation behavior shall be removed from service until repaired and calibrated.
- d. The manometer shall be equipped with an audible system programmed to sound if pressure within the enclosure in respect to the pressure outside the enclosure drops to negative 0.01 inches of water or lower.
 - e. The number of manometers per enclosure will depend upon the size of the enclosure and shall adequately provide negative air pressure data spatially throughout the enclosure, both vertically and horizontally. The Contractor shall provide their opinion on the number of manometers needed for each enclosure for the Owner to review, the total number will be decided on discussions between the Contractor and Owner.
 - f. Copies of the daily continuous read strip readings for each manometer shall be provided weekly to the Owner for review.
 - g. If negative enclosure interior pressure conditions change, the Contractor shall be responsible for providing, operating, and maintaining additional manometers as necessary.
10. Following the completion of enclosures and after NAMs are operational, the Contractor shall test the enclosure for leakage and dead air zones utilizing smoke tubes. If leaks are discovered, the Contractor shall repair or reconstruct the enclosure as needed. If dead air zones are discovered, the Contractor shall add or adjust the NAMs to eliminate the dead air space.
11. The Contractor shall clearly identify and maintain emergency and fire exits in all negative pressure enclosures.
12. The Contractor shall remove, clean and enclose in polyethylene sheeting ceiling-mounted objects such as lights and other items that may interfere with the abatement process and were not previously cleaned and sealed off. Utilize localized spraying of amended water and / or HEPA vacuums to reduce fiber dispersal during the removal of these fixtures.
13. The Contractor shall maintain a logbook in the clean room area for each enclosure. Copies of the logbook shall be provided to the Owner upon request. All individuals who enter the Work area shall sign in, recording:
- a. Name
 - b. Affiliation (Contractor, regulatory agency, etc.)
 - c. Work phone number
 - d. Purpose of entry
 - e. Acknowledgement that the individual has reviewed and understands Jobsite emergency contingency plan
 - f. Time in and time out for each entry

3.4 CONSTRUCTION AIDS

- A. The Contractor shall setup, maintain, and inspect construction aids as specified in Section 01 54 00 – Construction Aids and as necessary for the performance of the Work.
- B. Aerial lifts shall be used in accordance with manufacturer specifications and procedures. Only trained personnel shall operate an aerial lift and all workers entering the lift will wear and operate proper fall protection procedures in accordance with 29 CFR 1926.500.

- C. Temporary lighting shall be installed, powered, and maintained by the Contractor as necessary for the Work. Temporary lighting shall provide ample lighting to safely perform the Work and for safe travel throughout the Work area. Temporary lighting used in areas where wet conditions are required shall be properly protected from moisture to prevent an electrical hazard.

3.5 HEALTH AND SAFETY

- A. All employees involved in asbestos abatement activities shall be licensed by IDPH. Licenses shall be available at the Jobsite.
- B. The Contractor shall provide, as a minimum, one person certified as an asbestos abatement supervisor and this person shall be responsible for overall performance of abatement activities in compliance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. This person shall be immediately available when any abatement Work is performed. If abatement Work is performed on multiple shifts, each shift shall have a certified asbestos supervisor.
- C. The certified asbestos supervisor shall conduct a daily safety briefing to discuss topics including, but not limited to, emergency exit routes and procedures, location of telephone and emergency contact numbers, locations of fire extinguishers and first aid kits, special precautions for hazardous materials, protective equipment, scaffolding procedures, proper use of ladders, electrical safety, air monitoring and sampling results, etc. All attendees shall sign an acknowledgement of attendance and these records shall be maintained by the Contractor for the duration of the Contract and two years thereafter.
- D. The Contractor shall use appropriate and approved respiratory protection for the types of abatement being performed. Spectacle kits and eyeglasses shall be provided for employees who wear glasses and who shall wear full-face piece respirators. Respirators shall be provided that have been tested and approved by the National Institute for Occupational Safety and Health (NIOSH) for use in asbestos-contaminated atmospheres. It is assumed that the Contractor will not perform asbestos abatement Work that would cause an asbestos fiber concentration above 2.0 fibers per cubic centimeter (f / cc), which would require a stop Work and re-evaluation of Work practices to prevent asbestos fiber release above 2.0 f / cc. The following respirators shall be used, which are based on the maximum asbestos fiber concentration ranges recorded from the regulated area and the type of Work being performed:
 - 1. Half-mask or full face air-purifying respirators with HEPA filters shall be worn during the preparation of the Work area, performance of repairs (e.g., using glovebag techniques), during removal techniques and final cleanup procedures provided airborne fiber concentrations inside the Work area are less than 0.1 f / cc.
 - 2. Full face tight fitting piece powered air-purifying respirators (PAPRs) equipped with HEPA filters shall be worn during the removal, encapsulation, enclosure, repair and / or other disturbance of friable ACM whenever airborne fiber concentrations inside the Work areas are equal to or greater than 0.1 f / cc and less than 2.0 f / cc. A supply of charged replacement batteries, HEPA filters and flow test meter shall

- be available in the clean room for use with PAPR HEPA filters shall be changed daily or as flow testing indicates change is necessary. Any Type C supplied-air respirator operated in continuous flow may be substituted for a PAPR.
3. Full face piece Type C supplied-air respirators operated in pressure demand mode with HEPA filter disconnect protection shall be worn during gross removal, demolition, renovation and / or other disturbance of ACM whenever airborne fiber concentrations inside the Work area are equal to or greater than 2.0 f / cc and less than 10.0 f / cc.
 4. Full face piece Type C supplied-air respirators operated in pressure demand mode equipped with an auxiliary positive pressure self-contained breathing apparatus shall be worn during gross removal, demolition, renovation and / or other disturbance of ACM whenever airborne fiber concentrations inside the Work area are equal to or greater than 10.0 f / cc.
- E. Compressed air systems, if used, shall meet the requirements of 29 CFR 1910.134(d).
- F. Emergency planning procedures shall be established for negative pressure enclosures to train and prepare workers for potential power disruptions, containment collapse (through negative pressure pull down) or containment breach (hit, cut, or torn) by fire; explosion; toxic atmosphere; electrical hazards; worker slips, trips, and falls; or heat-related injuries. Procedures for non-life threatening and life-threatening injury or illness, including procedures for rescuing injured or fallen workers from height, shall be outlined in the Contractor's Health and Safety Plan and training documents.
- G. The Contractor is responsible for air monitoring and sampling specified in order to comply with IDPH and other Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.
- H. Air monitoring samples shall be submitted to an Owner-approved accredited laboratory as specified in this Section.

3.6 REGULATED MATERIALS

- A. The Contractor shall remove non-asbestos regulated materials present within planned abatement enclosures, prior to commencing abatement of asbestos or protect regulated materials, including those that can be characterized as nonhazardous industrial material, hazardous waste, universal waste, and PCB-containing material, via critical barriers. Lockdown type encapsulants shall not be used as a critical barrier to protect regulated materials.
- B. Regulated materials shall be removed as specified in the following Sections:
1. Section 01 74 00 – Cleaning and Waste Management
 2. Section 02 83 00 – Lead Control and Removal
 3. Section 02 84 00 – PCB-Containing Material Removal
 4. Section 02 87 00 – Nonhazardous and Hazardous Waste Removal
 5. Section 02 88 00 – Universal Waste Removal

3.7 MATERIAL IDENTIFICATION AND CHARACTERIZATION

- A. As indicated, descriptions and locations of confirmed and suspect ACM are detailed in Appendix A. Details provided in Appendix A are not considered all inclusive. Materials that are not clearly confirmed to be non-ACM shall be treated as suspect ACM unless determined through analysis that the material is non-ACM. As such, the Contractor shall collect representative samples of all materials encountered during demolition that are suspected of containing asbestos to confirm the presence or absence of asbestos. If ACM are identified during the execution of the Work, it shall be the Contractor's responsibility to abate, manage, transport, and dispose of the ACM in accordance with all Federal, State, local laws, ordinances, codes, rules and regulations. Sampling requirements include, but are not limited to, the following:
1. At least 24 hours prior to performing the bulk asbestos sampling, the Contractor shall notify the Owner of the type and location of materials being sampled and the number of samples to be collected. An Owner's representative shall be present when all samples are collected. The Contractor shall not collect samples without prior approval from the Owner. Samples collected without an Owner's representative present or without the authorization of the Owner shall be rejected.
 2. Identification and sampling of suspect ACM shall be performed by a current IDPH licensed asbestos inspector.
 3. The minimum number of bulk samples shall be those required by 40 CFR 763 (AHERA) or Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work, whichever requires the higher number of samples, to adequately characterize an identified suspect material. At a minimum two samples will be collected from each MM, 3-5-7 Rule from each SM, and three samples from each TSI.
 4. Samples shall be collected of suspect ACM using a coring device or other method, as appropriate, to extract a small cross-sectional volume representative of all layers present while minimizing damage to the material sampled. Locations shall be marked with the sample ID nomenclature.
 5. Sample Location Documentation
 - a. A sample location map / Drawing shall be prepared showing sample locations with sample identifications and a north direction arrow. A copy of an existing floor plan is an acceptable template for the sample location map.
 - b. A minimum of two photographs shall be taken of each sample location. The photographs shall be included in the sample results report. A minimum of one photograph shall be a close-up view of the sample location and material. A minimum of one additional photograph shall be taken at a sufficient distance away from the sample location that shows not only the sample location but also a frame of reference to the general location of the sample within the building. The intent is to be able to identify where the sample was collected so as the area can be inspected at a later date, if necessary.
 6. Individual bulk samples shall be placed in clean, unused sealable plastic bags and individually labeled with a unique sample identification number.

7. Samples shall be submitted to an Owner approved laboratory under chain-of-custody procedures. The laboratory shall be accredited under National Voluntary Laboratory Accreditation Program (NVLAP).
 8. Bulk samples shall be analyzed using PLM in accordance with USEPA Test Method EPA 600 / R-63 / 116. The Owner does not allow bulk asbestos samples to be analyzed by point counting or TEM analysis.
- B. The Contractor shall collect additional samples as requested by the Owner's designated certified asbestos inspector.
- C. For each sampling location the Contractor shall prepare and submit to the Owner a sample summary report. The report shall include the following:
1. Sample location map / Drawing
 2. Sample location photographs
 3. Analytical data report
 4. Contractor representative's signature and date

3.8 PREPARATION OF THE WORK AREA

- A. The abatement Work shall not begin until:
1. Applicable notifications / permits are in hand and posted at the Jobsite.
 2. Regulatory agencies have been notified, as required, of impending Work.
 3. All required pre-Work submittals, notifications, and postings have been provided and are satisfactory to the Owner.
 4. All worker and supervisor training, certification, medical monitoring, and fit testing are current and documentation is readily available on the Jobsite.
 5. Floor drains and pits / sumps have been sealed.
 6. Regulated materials present within planned enclosures are removed or protected via critical barrier, unless otherwise approved by the Owner.
 7. Pre-abatement air monitoring and sampling has been performed as specified.
 8. All electrical equipment have been confirmed to be in a de-energized state. The Contractor shall provide special precautions in the event that certain equipment cannot be de-energized.
 9. All objects that are movable are removed from planned regulated Work area(s) to protect them from potential asbestos contamination.
 10. All permanent objects shall be properly enclosed with 6-mil polyethylene sheeting and sealed to prevent contamination. Cladded enclosed systems (i.e., metal cladded piping) shall not qualify as an approved critical barrier; therefore, cladded enclosed systems shall be properly enclosed with 6-mil polyethylene sheeting or if the insulation system is non-ACM, the system removed from the Work area prior to disturbing asbestos in that Work area.
 11. Work areas that contain significant amount of accumulated dust and debris shall be pre-cleaned by installing drop cloths and using HEPA-filtered vacuums or wet cleaning methods as appropriate. Do not use methods that would raise dust such as dry sweeping or vacuuming with equipment not equipped with HEPA filters. Do not disturb ACM during the pre-cleaning phase.

12. Barriers and enclosures have been setup as specified.
13. The Contractor and the Owner have inspected the Work area and both have approved the Work area is completed and maintaining necessary negative pressure, as proven from manometer readings over a minimum 24-hour period, and smoke testing indicates no dead space areas.
14. Negative pressure ventilation and supplied air systems, if used, are functioning adequately and have been tested.
15. All equipment for abatement cleanup and disposal are on hand.

3.9 AIR MONITORING AND SAMPLING

- A. The Contractor will perform air monitoring as outlined below.
 1. The Contractor will be responsible for performing air monitoring as follows:
 - a. Personal air monitoring for their respective workers, Subcontractors, suppliers, agents and representatives.
 - b. Pre-abatement monitoring to determine the relative airborne fiber concentrations in an area during the normal functioning of that building or space prior to being disturbed. A minimum of one pre-abatement sample will be collected for each planned negative pressure enclosure. Pre-abatement monitoring samples will be analyzed using PCM analysis.
 - c. Environmental / perimeter air monitoring at locations and frequencies that will accurately characterize any airborne asbestos fiber concentrations. The assessment shall demonstrate that the product or material containing asbestos minerals, or the abatement involving such product or material, cannot release airborne asbestos fibers in concentrations exceeding 0.01 f / cc as a time weighted average (TWA) under those Work conditions having the greatest potential for releasing asbestos. The monitoring shall be at least once per shift at locations including, but not limited to, close to the Work inside a regulated area; each outside entrance to a regulated area; close to glovebag operations; representative locations outside of the perimeter of a regulated area; inside clean room; and on a rotating schedule at the exhaust discharge point of each local exhaust machine ducted to the outside of a containment. If the sampling outside a regulated area shows airborne fiber levels have exceeded background or 0.01 f / cc, whichever is greater, the Work at that regulated area shall be stopped immediately, and the Owner notified. The Contractor shall investigate the cause of the problem and correct it immediately. Work shall not restart until authorized by the Owner.
 - d. Final air clearance monitoring upon completion of abatement Work, prior to removing regulated area designations, and prior to the removal of any negative enclosure materials. The Contractor shall perform clearance sampling after the Owner has completed a final visual inspection of each regulated area with the Contractor's asbestos supervisor and bridging and penetrating encapsulant has been applied and allowed to dry, if required. Negative pressure enclosures will remain in place with NAMs operating until the final air clearance analytical results meet acceptable levels specified. The number of clearance air samples will be dependent upon

the size of the regulated area. Clearance monitoring samples will be analyzed using PCM analysis. If PCM results are inconclusive, TEM analysis may be performed as approved by the Owner. The Contractor shall prepare a final air clearance form that includes a description of the enclosure area, air sample identification number, sampling flow rate and volume, date and time of sample collection, name of laboratory performing analysis, and sample results. The Owner's representative and the Contractor's asbestos abatement supervisor will sign off on the final air clearance form acknowledging the results.

- B. Air sampling requirements include, but are not limited to, the following:
1. If final clearance sampling results fail to meet the final clearance requirements (i.e., 0.01 f / cc), the Contractor shall pay all costs associated with the required re-cleaning, re-sampling and analysis, until final clearance requirements are met.
 2. Personal monitoring will be performed to monitor the potential exposure to individual workers / employees to airborne asbestos while working inside an asbestos regulated area. The Owner and Contractor are required by Illinois OSHA to collect its own employee air samples. The number of personal air samples will be dependent upon the number of workers performing each task within the regulated area (i.e., applying water, handling asbestos waste, transporting asbestos waste, etc.). A minimum of one personal air sample will be collected per ten workers per task. It is anticipated that only one person per task would require a personal air sample would be needed in the event asbestos is encountered during demolition. At the discretion of the Owner, fiber concentrations may exceed 0.1 f / cc but shall not exceed 1.0 f / cc expressed as an 8-hour TWA. Should an environmental concentration of 1.0 f / cc expressed as an 8-hour TWA occur inside a regulated Work area, Work shall stop immediately, the Owner shall be notified, and the Contractor shall implement additional engineering controls and Work practice controls to reduce airborne fiber levels below prescribed limits in the Work area. Work shall not restart until authorized by the Owner.
 3. Where feasible, samples shall be collected according to the NIOSH Method 7400 (as revised).
 4. Personnel conducting onsite asbestos air sample analysis shall be listed on American Industrial Hygiene Association (AIHA) Registry of Proficiency and shall have successfully completed NIOSH 582 (or equivalent) training.
 5. Cellulose ester 25-millimeter (mm) filters with 50 mm conductive cowl extensions will be used for all sampling.
 6. All inside and outside air sampling shall be continuous throughout Work shift.
 7. The following methods shall be used for collecting and analyzing air sample filters:
 - a. Non-clearance sampling: OSHA Reference Method.
 - b. Final air clearance sampling: NIOSH 7400 Method using PCM measurement and airflow rates between 1 and 10 liters per minute. At least 1,200 liters of air shall be collected.
 - c. TEM analysis, if needed, will be NIOSH Method 7402.
 8. Sample volumes shall be sufficient to establish the quantification limit (QL) necessary for the type of sample collected. Sample volumes will be sufficient to collect between 100 and 1,300 fibers per square millimeter (f / mm²) of filter area.

- a. Pre-abatement and clearance sampling: At a minimum, the QL will be 0.005 f / cc based on the USEPA suggested minimum filter loading of 10 fibers in 100 fields counted.
 - b. Personnel sampling: the QL will be 0.05 f / cc. Note: this cannot be accomplished with a short-term exposure limit.
- C. Laboratory testing requirements include:
1. The laboratory shall be accredited by the US Department of Commerce, National Institute of Standards and Technology's NVLAP program.
 2. The laboratory shall be satisfactory participants in the NIOSH PAT program and AIHA Registry and shall produce their PAT number and results upon request.
 3. Samples shall be submitted to an accredited laboratory approved by the Owner under chain-of-custody procedures.
 4. Mobile laboratory services (i.e., onsite laboratory) shall be staffed with qualified and licensed workers in accordance with Federal, State, local laws, ordinances, codes, rules and regulations.
- D. Contractor air monitoring and laboratory analysis results shall be available at the Jobsite prior to the start of abatement for the same Work shift the following day. The Contractor shall submit air monitoring data to the Owner on a weekly basis and upon request. Final air clearance results will be provided by the Owner within 24 hours of confirmed receipt of results from the laboratory.

3.10 MATERIAL REMOVAL AND HANDLING

- A. The Contractor shall wet all ACM with amended water solution using equipment capable of providing a fine spray mist. Avoid knocking the material loose during the wetting operation. Saturate the material to substrate prior to removal; however, do not allow excessive water to accumulate in the Work area. Keep all removed material saturated until it can be containerized for disposal. Maintain a high humidity in the barrier or enclosure throughout the abatement period by misting or spraying to ensure material saturation and reduce the potential for elevated airborne concentrations. Wetting procedures are not equally effective on all types of ACM; nonetheless, they shall be used in all cases.
- B. The Contractor shall remove ACM in a manner to maintain the ACM intact and to reduce the damage to the ACM as much as possible. The use of dry sweeping and compressed air on ACM are prohibited.
- C. The Contractor shall repair and / or replace polyethylene sheeting as necessary during the performance of the Work.
- D. The Contractor shall double bag, seal, and keep adequately wet all asbestos waste material prior to removal from the enclosure or immediately upon removal of the barrier (i.e., glove bag). Bagged and sealed asbestos waste shall be staged at designated areas within the enclosure and prepared for transport to exterior waste containers daily.

- E. The Contractor shall remove sealed bags and containers of asbestos-containing waste from the enclosure at designated waste loadout locations only, to prevent asbestos contamination from leaving the enclosure. Each bag or container of asbestos waste shall be pre-labeled as specified and kept adequately wet.
- F. The Contractor shall line, and seal roll-off containers used for asbestos-containing waste storage and transportation with 6-mil polyethylene sheeting to prevent possible release of asbestos during staging, transport, and disposal activities.
- G. Residual ash contaminated with asbestos shall be managed in dedicated waste disposal containers from the other asbestos waste containers due to different landfill requirements. The waste will be considered friable asbestos waste (i.e., RACM).
- H. The Contractor shall collect and filter all decontamination water and shower wastewater before disposal. The filtration system shall include a 5.0-micron filter for asbestos. It is recommended that the filtration system include a series of filters ranging in pore sizes from 100 to 5 microns to allow for filtration of large and small solids and reduce filter overloading. Spent filters shall be managed as asbestos waste and placed in labeled 6-mil bags and sealed.
- I. The Contractor shall collect all decontamination water and shower wastewater into leak tight containers. Collected decontamination and shower wastewater shall be handled as specified in Section 01 74 00 – Cleaning and Waste Management.
- J. It is the Contractor's responsibility to notify the Owner when a regulated area is complete and is ready for visual inspection prior to encapsulation and final air clearance monitoring. The Work area and surfaces shall be dry and cleaned of all ACM and asbestos waste prior to the visual inspection by the Owner. If any accumulation of residue or debris is observed, it will be assumed to be asbestos and the Contractor shall re-clean the area until all suspect material is removed and no visible suspect material remains.

3.11 CLEARANCE OF WORK AREA

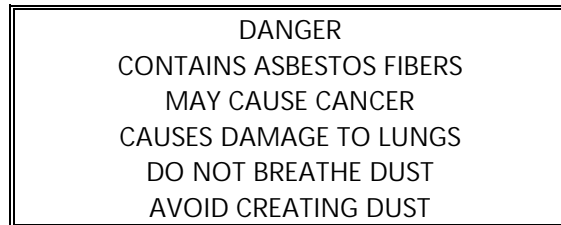
- A. The following Work area clearance process shall apply to all Work areas where Class I or Class II asbestos project Work is performed:
 - 1. The Owner will be entering each regulated area to monitor safety protocols and daily work progress. Based on daily progress updates communicated between the Owner and the Contractor, the Contractor will schedule a final visual inspection with the Owner. Following Contractor certification the Work area is visually clean and void of asbestos residue and debris, the Contractor will schedule with the Owner a final visual inspection for each regulated area at a minimum of 48 hours ahead of time. The Owner will perform a final visual inspection of the area with the Contractor's asbestos supervisor.
 - 2. If deficiencies are encountered during the inspection, the Owner shall create a punch list and forward the list to the Contractor. If the deficiencies are limited and minor in nature, the Owner and Contractor may agree to address the deficiencies immediately in an attempt to achieve final visual inspection approval.

3. Contractor shall resolve all punchlist items and repeat the Work area clearance process at no additional cost to the Owner. The Owner will not be charged for the cleanup time, materials, air monitoring costs, or delay costs. Delays resulting from non-compliant visual inspections will not constitute an extension to the project timeline.
4. If the Contractor and Owner cannot agree upon an alternative solution to the management of asbestos that cannot be removed prior to demolition, an evaluation to obtain a regulatory variance from the IDPH shall be completed by the Contractor. In order to implement a regulatory variance, a copy of the regulatory variance on IDPH letterhead or agency email approval shall be provided to the Owner prior to implementing the variance related Work.
5. Upon receipt of final visual clearance approval, the Contractor shall apply a lockdown type encapsulant to all surfaces and on all asbestos which still remains.
 - a. In cases when negative pressure enclosures have been used, maintain operation of negative air system during the encapsulation process.
 - b. Mix ratio of encapsulant shall meet manufacturer's recommendations.
 - c. Apply encapsulant with airless sprayer on to substrate.
6. The Contractor shall conduct final air clearance sampling using aggressive sampling techniques as follows:
 - a. Before sampling pumps are started, the exhaust from forced air equipment (leaf blower with at least one horsepower electric motor) will be swept against the walls, ceilings, floors, ledges and other surfaces in the room. This procedure will be continued for 1 minute per 1,000 square feet of area. Fans may be used to circulate air within Work enclosure.
 - b. Samples will be collected in areas subject to normal air circulation away from room corners, obstructed locations and near windows, doors or vents in areas coinciding with pre-abatement sample locations. The number and volume of air samples taken and analytical methods used will be in accordance with the following schedule.
 - i. A minimum of one sample and one lab blank will be taken at a flow rate of 1 to 10 liters per minute to give a fiber density of between 100 to 1,300 f / mm² on the filter and analyzed as follows:
 - a.) Fibers on each filter will be measured using the NIOSH Method 7400. At least 1,200 liters of air will be collected.
 - b.) Verbal laboratory results will be available within 8 hours of taking clearance samples. A complete written record of all air monitoring tests and inspections will be furnished to the Owner within 24 hours of sample collection.
 - ii. Decontamination of the Work area is complete when every clearance sample is equal or less than 0.01 f / cc or less than pre-abatement levels whichever is lower. If any sample exceeds 0.01 f / cc, then the decontamination is incomplete and re-cleaning is required. If TEM analysis is required, the clearance sample must be equal to or less than 70 structures per square millimeter (s / mm²).
 - c. The NAMs must be left running during the procedure.

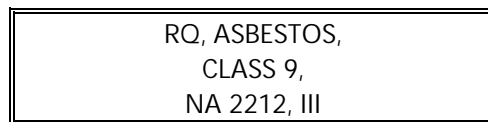
7. If air sample results indicates the presence of asbestos, the Contractor shall reclean the Work area so that air clearance sampling can be repeated by the Owner. Final air clearance sampling will be repeated until air sample results indicate that the removal of all asbestos has been completed within regulatory limits.

3.12 LABELING

- A. Each bag or container of asbestos waste shall be pre-labeled in accordance with 29 CFR 1910.1200 (f) of OSHA's Hazard Communication Standard as follows:



- B. Each bag or container that contains friable asbestos waste, a second pre-printed label shall be present on each bag and individual waste container in accordance with 49 CFR Parts 171 and 173 of USDOT regulation as follows:



3.13 MARKING

- A. Each bag or container that contains asbestos waste shall be marked as required by 49 CFR Part 172, including the generator's name (the Owner) and address.

3.14 TRANSPORTATION AND DISPOSAL

- A. Transportation and disposal shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.
- B. All transportation of asbestos-containing waste material shall adhere to all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work, including, but not limited to 49 CFR 107.
- C. All transport vehicles and containers shall be properly placarded as required by 49 CFR 172.

3.15 INSPECTIONS

- A. Enclosures shall be inspected and tested prior to commencement of abatement (pre-abatement) and prior to removal of enclosures (post-abatement clearance). Inspections and testing shall be performed with the Owner present. The Contractor shall include inspection entries in the Contractor's project schedule for each enclosure to ensure the activity is tracked and completed.

- B. Prior to commencement of asbestos abatement Work, the Contractor shall prove each negative air enclosure is maintaining the required negative air pressure by allowing the NAMs to operate for a minimum of 24-hours prior to having the inspection with the Owner.
- C. The Contractor's certified asbestos abatement supervisor shall perform daily inspections during the performance of abatement Work. This will include the asbestos abatement supervisor entering negative air enclosures at least once per day where Work is being performed.
- D. The Owner may perform daily inspections within enclosures during the performance of the Work. The inspection frequency and duration will be at the discretion of the Owner. If the Owner requests to be accompanied by a representative of the Contractor during the inspection, the Owner will provide at least a four hour notice ahead of time so the Contractor can plan to attend. If the Contractor chooses to accompany the Owner during the daily inspection, the Contractor shall communicate with the Owner during the inspection. The Contractor's representative will be a member of the Contractor's abatement team who is qualified and knowledgeable of the Work being performed.
- E. The Contractor will be required to schedule and walk the regulated area with the Owner to visually inspect the area for ACMs and / or asbestos waste and all surfaces have been appropriately cleaned. The Contractor may not take containment down without the Owner's concurrence.
- F. The Contractor shall maintain and supply at all times complete sets of equipment, such as respirators, respirator filter cartridges, and disposable PPE clothing with the same protection factor as required for entry to controlled Work areas, for agency inspectors and / or the Owner use. It is the Contractor's responsibility to ensure all necessary medical qualification, training, and "fit test" certificates are current prior to using any respirator or PPE provided by the Contractor.
- G. The Owner and Contractor shall perform a post Class I negative containment enclosure tear down visual inspection to check for possible residual suspect ACMs and / or debris that may have been generated during the removal of the negative containment enclosure materials. The procedures followed will be similar to the final visual inspection including completion of a visual clearance form. If any suspect ACMs or debris are observed, it will be noted on the inspector form and the Contractor shall remove the materials as asbestos waste. Upon completion of the removal, the Contractor will request another visual inspection by the Owner.
- H. Additional requirements for inspections are outlined in Section 01 41 00 – Regulatory Requirements and Section 01 74 00 – Cleaning and Waste Management.

END OF SECTION

SECTION 02 83 00 – LEAD CONTROL AND REMOVAL

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. The Contractor shall supply all labor, equipment, materials, services, and personal protective equipment (PPE) necessary to remove lead and other heavy metals in construction materials as necessary to dispose / recycle the materials in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.
- B. A *Pre-Demolition Site Characterization* survey was performed in March 2022, and the report is provided in Appendix A. The report indicated that lead is present in paints throughout the building. A supplemental sampling effort performed in August 2022 indicated a toxic characteristic leaching procedure (TCLP) lead concentration of 17 parts per million (ppm) in a composite paint sample, exceeding the hazardous waste limit of 5 ppm. Results from this sampling effort are also included in Appendix A. Details provided in Appendix A are not considered all inclusive. In general, the paint is in poor condition and is peeling. The Contractor shall be responsible for verifying locations, conditions, and removal of lead and other heavy metals in construction materials as necessary, whether included in reports provided in Appendix A or discovered during the Work, unless otherwise specified. The Contractor shall be responsible for appropriate identification and management and worker protections for all metals, whether or not identified in the previous sampling efforts.
- C. Structural demolition of buildings does not require removal of lead-bearing substances or lead-licensed contractors or workers. However, the following minimum requirements must be met to prevent spread of lead contamination:
1. Prevent foot or other traffic through the demolition area that may spread lead-bearing dust to other building areas
 2. Remove and dispose of loose (flaking) lead-based paint from substrate prior to demolition
 3. Remove and dispose of loose lead-based paint from floors and horizontal surfaces
 4. Mist water during demolition activities to suppress dust release
 5. Retain demolition debris within the immediate demolition area
- D. As part of the Work the Contractor shall perform the following:
1. Setup and maintain enclosures / containment and establish regulated areas
 2. Protect adjacent surfaces within enclosures / containments as needed
 3. Abate damaged paint from lead-bearing items including moving of furnishings
 4. Clean-up lead-bearing dust, flakes, and residues
 5. Confirm cleanup / decontamination objectives are achieved
 6. Collect, containerize, and label waste
 7. Collect samples of abated / removed materials for waste characterization purposes
 8. Manage and store waste at the Jobsite until waste characterization data is received

9. Transport and dispose abated / removed materials at an Owner-approved facility licensed to handle the materials as characterized by the sample data
- E. It is important to note that asbestos-containing debris is present on some floors and other surfaces in the building and polychlorinated biphenyls (PCBs) have been detected in several paint samples at concentrations ranging between 0.96 and 50 ppm (see Appendix A). The Toxic Substances Control Act (TSCA) limit for PCBs is 50 ppm. When lead, PCB, and asbestos Work is combined, the more stringent regulations and procedures shall apply. Lead wastes mixed with asbestos waste must be disposed together as asbestos waste with regulated lead waste depending on waste characterization (TCLP) results. Requirements for abatement of asbestos-containing materials (ACM) and PCB removal are specified in Section 02 82 00 – Asbestos Abatement and Section 02 84 00 – PCB-Containing Material Removal, respectively.
- F. The Contractor's certified industrial hygienist and Jobsite health and safety officer shall implement and monitor all health and safety measures and controls related to removal and handling of lead-coated materials and review all collected data.
- G. The removal, management, storage, transportation and disposal or recycling of lead-coated materials shall be performed in accordance with these Technical Specifications and all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. Lead wastes shall be managed with the safety precautions of hazardous wastes by the Contractor until documented otherwise with concurrence from the Owner.

1.2 ABBREVIATIONS AND DEFINITIONS

- A. Abbreviations and definitions relevant to lead control Work include the following:
 1. *Abatement contractor (AC)*: The entity responsible for performing the Work, with the training and accreditation to competently perform the Work. This entity shall obtain and maintain any licenses required for the Work in this Section.
 2. *Action level*: Employee exposure, without regard to use of respirators, to an airborne concentration of lead of 30 micrograms per cubic meter ($\mu\text{g} / \text{m}^3$) of air averaged over an 8-hour period. As used in this Section, "30 $\mu\text{g} / \text{m}^3$ of air" refers to the action level.
 3. *Air monitoring*: The process of measuring the concentration of lead in a specific volume of air in a stated period of time.
 4. *Area monitoring*: Sampling of lead concentrations within the lead control area, inside the physical boundaries that are representative of the airborne lead concentrations that may reach the breathing zone of personnel potentially exposed to lead.
 5. *Breathing zone*: An area within a hemisphere, forward of the shoulders, with a radius of 6 to 9 inches and the center at the nose or mouth of an employee.
 6. *Contractor*: The entity responsible for performing the complete scope of Work in the Contract Documents. The Contractor may elect to self-perform or subcontract out any portion of the Work.

7. *Competent person*: One who is capable of identifying existing lead hazards in the workplace and selecting the appropriate control strategy for lead exposure, who has the authority to take prompt corrective measures to eliminate them, who is specially trained in a training course which meets the criteria of Illinois Environmental Protection Agency's (EPA) model accreditation plan for supervisor, or its equivalent.
8. *HEPA*: High efficiency particulate air.
9. *HEPA filter*: Air filter capable of trapping 99.97% percent of particles greater than 0.3 micrometers in mass median aerodynamic equivalent diameter.
10. *IDPH*: Illinois Department of Public Health.
11. *Industrial hygienist*: A individual that is either: certified by the American Board of Industrial Hygiene and has prior experience in the health and safety aspects of a lead hazard control work project or a certified safety professional with a minimum of three years prior experience in industrial hygiene relating to lead hazard control work.
12. *Lead*: Metallic lead, inorganic lead compounds, and organic lead soaps. Excluded from this definition are other organic lead compounds.
13. *Lead abatement contractor / supervisor (supervisor)*: any person who supervises lead abatement workers. This person must be trained, accredited, and licensed as required, and must also meet OSHA "competent person" criteria for lead abatement.
14. *Lead-based paint*: Paints or coatings that are lead bearing substances as defined by IDPH regulations.
15. *Lead bearing soil*: Soil containing an amount of lead in excess of applicable guidelines.
16. *Lead permissible exposure limit*: Lead permissible exposure limit of 30 µg / m3 of air as an 8-hour time weighted average.
17. *OSHA*: Federal Occupational Health and Safety Administration.
18. *Personal monitoring*: Sampling of lead concentrations within the breathing zone of an employee to determine the 8-hour TWA concentration in accordance with 29 Code of Federal Regulations (CFR) 1926.62.
19. *SDS – safety data sheets*: Information required by OSHA for any chemical in the workplace that that could be expected to cause an exposure to workers during normal use or in emergency situations.
20. *Time weighted average*: Airborne concentration of lead averaged over an 8-hour workday to which an employee is exposed.
21. *TCLP – toxicity characteristic leaching procedure*: Procedure specified in USEPA 530/SW-846, Test Methods for Evaluating Solid Waste: Physical/Chemical Methods 3rd edition, November 1986.
22. *Wet cleaning*: Cleaning all surfaces with a phosphate-free lead dissolving detergent.
23. *Work area*: areas where lead removal / abatement activities are conducted.

1.3 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:

1. Section 01 32 00 – Project Controls Requirements
2. Section 01 33 00 – Submittal Procedures
3. Section 01 35 13 – Special Project Procedures
4. Section 01 41 00 – Regulatory Requirements
5. Section 01 56 16 – Dust and Odor Controls
6. Section 01 57 13 – Temporary Erosion and Sediment Controls
7. Section 01 74 00 – Cleaning and Waste Management
8. Section 02 00 00 – Existing Conditions
9. Section 02 82 00 – Asbestos Abatement
10. Section 02 84 00 – PCB-Containing Material Removal
11. Section 02 87 00 – Nonhazardous and Hazardous Waste Removal

- B. Work outlined in this Section shall be performed in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. References to regulatory requirements are included in Section 01 41 00 – Regulatory Requirements.

1.4 SUBMITTALS

- A. Work to be performed for lead control shall be outlined in appropriate Work plans specified in Section 01 35 13 – Special Project Procedures.
- B. Work performed during lead control activities shall be summarized in the weekly progress report, as specified in Section 01 32 00 – Project Controls Requirements, and in the construction summary report, as specified in Section 01 35 13 – Special Project Procedures.
- C. Completed inspection forms, as specified in Section 01 41 00 – Regulatory Requirements and Section 01 74 00 – Cleaning and Waste Management.
- D. Analytical data, as specified in Section 01 35 13 – Special Project Procedures.
- E. Submittals associated with analytical for waste characterization and profiling and waste transportation and disposal documentation (e.g., waste manifests) is specified in Section 01 74 00 – Cleaning and Waste Management.
- F. Submittals shall be provided as required in Section 01 33 00 – Submittal Procedures.

PART 2 – PRODUCTS

2.1 EQUIPMENT

- A. The Contractor shall provide, power, operate, control, and maintain all equipment necessary for the performance of the Work. Equipment shall be operated and maintained in accordance with manufacturer's recommendations and requirements.

2.2 CONTAINERS AND PACKAGING

- A. The Contractor shall provide US Department of Transportation (USDOT)-compliant containers in good condition, empty, and clean (decontaminated of formerly stored materials). Containers include drums, as required for small quantity containerization, or roll-off boxes for larger quantities of materials. Containers shall be made of materials compatible with the type of waste(s) being stored.

2.3 MATERIALS

- A. The Contractor shall provide all necessary materials to perform the Work. Materials shall be delivered to the Jobsite; handled, stored, and protected; and utilized as specified by manufacturer's recommendations and requirements.
- B. The Contractor shall provide new polyethylene sheeting of sufficient strength to prevent tearing or shredding during stockpiling and covering. Sheeting shall be made of materials compatible with the type of waste(s) being managed.

2.4 DUST SUPPRESSION

- A. Water shall be obtained from an Owner-approved source. Chemical additives or other dust suppression chemicals shall be approved by the Owner prior to use.

2.5 ENCLOSURES

- A. Enclosure materials shall be fire-retardant and conform to the applicable local fire codes.
- B. The enclosures shall be constructed of materials such that when the enclosure is completed there is limited potential for impact damage to the enclosure and no potential for dust release.

2.6 SAFETY AND SIGNAGE

- A. The Contractor shall provide and install safety signage as required by the Occupational Safety and Health Administration (OSHA), US Environmental Protection Agency (USEPA), Illinois OSHA, and Illinois Environmental Protection Agency.
- B. The Contractor shall provide and install signage for storage areas, containers, and transportation vehicles as required by Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.

2.7 SPILL RESPONSE

- A. The Contractor shall provide appropriate spill response materials including, but not limited to the following: containers, absorbents, shovels, and PPE. Spill response materials shall be available at all times when contaminated materials / wastes are being handled or transported. Spill response materials shall be compatible with the type of materials and contaminants being handled.

PART 3 – EXECUTION

3.1 NOTIFICATIONS

- A. Contractor shall notify the Owner prior to commencing new Work tasks.
- B. The Contractor shall notify the Owner immediately when regulatory agency and / or local municipal representatives are present at the Jobsite. The Owner shall attend all regulatory agency Jobsite meetings and / or inspections as the Owner deems necessary.
- C. The Contractor shall notify the recycling facility of the presence of lead or other heavy metals on materials designated for recycling as required.

3.2 EXISTING CONDITIONS

- A. The Contractor shall evaluate existing conditions in areas of Work as specified in Section 02 00 00 – Existing Conditions to identify, evaluate, control, and mitigate hazards present or that may be encountered during the Work.
- B. In general, paint on surfaces is in poor condition and is peeling. Paint chips are present on ground and other surfaces. A TCLP lead concentration of 17 ppm was detected in a composite paint sample collected in August 2022, which exceeds the hazardous waste limit of 5 ppm. Significant amounts of damaged building materials are also on floor and other surfaces throughout the building. Some of the damaged building materials on the floor are ACM or contaminated with ACM. PCBs have also been detected in several paint samples at concentrations ranging between 0.96 and 50 ppm (see Appendix A).

3.3 HEALTH AND SAFETY

- A. The Contractor shall perform or provide an exposure assessment prior to the start of the Work to determine the requirements for respiratory protection and frequency of OSHA monitoring for each type of activity.
- B. The Contractor shall perform OSHA compliance air monitoring to determine exposures to its employees in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations.
- C. Where disturbances of lead-bearing substances produce dust, the dust must be assumed to contain lead until tested and proven otherwise. Dust suppression methods, such as misting with water and use of HEPA vacuums shall be implemented.
- D. The Contractor shall establish a controlled Work area that includes a perimeter sufficient to perform the Work around each building or area that contains lead or lead-coated building materials. The Work area shall remain designated as a controlled Work area following confirmed removal of all lead-coated materials until air monitoring results indicate concentrations less than $30 \mu\text{g} / \text{m}^3$.

- E. The Contractor shall limit access to the area of Work to authorized, trained, and protected personnel only. These may include employees of the Contractor, Contractor's Subcontractors, Owner; and Federal, State, and local inspectors. Personnel shall have completed and have up-to-date training applicable to the hazards of the Work and have appropriate PPE for health and safety hazards present in the area of Work.
- F. The Contractor shall provide and display caution signs, in clearly visible areas, at entrances to areas of Work indicating that hazardous material Work is being conducted and that unauthorized persons should not enter. Signs shall comply with applicable OSHA and Illinois OSHA regulations.
- G. Written emergency procedures shall be posted in each area of Work. Emergency procedures shall include contact names, contact phone numbers, and plans for medical emergencies and temporary loss of electrical power or water.
- H. The Contractor shall maintain a log-in sheet at each area of Work to log personnel entering and exiting areas of Work.
- I. The Contractor shall perform air monitoring as specified to determine appropriate safety and personal protective measures to be implemented.
- J. The Contractor shall provide personnel working within the controlled Work area with additional PPE, tools, hygiene stations, and other materials as necessary to perform the Work.

3.4 SPILL RESPONSE

- A. The Contractor shall respond to a spill as specified in Section 01 74 00 – Cleaning and Waste Management.

3.5 SCREENING

- A. The Contractor may collect representative samples of potential lead-painted materials throughout the building to confirm the presence / absence (and therefore extent) of lead and other heavy metals at concentrations exceeding hazardous waste designation limits. Results from this sampling effort may limit the number of controlled Work areas. Sampling locations shall be reviewed with and approved by the Owner.
- B. The number of samples shall be those required by Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work and those required by the disposal facility and Owner. Initial screening for presence / absence of lead and other heavy metals does not alleviate the requirement for the Contractor to ensure that all wastes are properly characterized, and materials transported offsite as nonhazardous waste are nonhazardous for lead and other heavy metals.
- C. Samples shall be submitted to an Owner-approved accredited laboratory under chain-of-custody procedures.

- D. Analytical data shall be submitted to the Owner upon receipt from the laboratory.

3.6 MATERIAL REMOVAL AND HANDLING

- A. The Contractor shall implement measures necessary to protect workers, authorized personnel, and the public from lead exposures during abatement and demolition Work. The procedures employed by the Contractor shall not create the potential for contaminating surrounding areas or materials with lead-containing (or other heavy metal) coatings or dust.
- B. The Contractor shall prevent the generation of dust at all times to the maximum extent practicable. The use of water for dust suppression shall be restricted to the smallest quantity necessary to minimize dust to avoid the potential of lead contaminant migration through water runoff or ponding. Excess water shall be collected and containerized for offsite disposal. In no case shall liquids generated during lead removal come into contact with uncontaminated soils, storm drains, surfaces, or into conduits / piping which may constitute a release to the environment.
- C. The Contractor shall maintain surfaces within the controlled Work area as free of accumulation of paint chips and dust as practicable. The Contractor shall restrict the spread of dust and debris from being distributed over the Work area. The use of compressed air to clean up the area is strictly prohibited. At the end of each shift, the Contractor shall clean the area of visible dust by vacuuming with a HEPA filtered vacuum cleaner, wet mopping the area, or cleanup by other appropriate means.
- D. Lead Removal / Abatement
 1. Loose flaking paint shall be removed from the substrate of all painted surfaces via dry methods, as specified in Section 01 74 00 – Cleaning and Waste Management. Removal via wet methods must first be approved by the Owner and if approved, shall be conducted as specified in Section 01 74 00 – Cleaning and Waste Management. The Contractor shall select a lead removal / abatement method that minimizes the potential to generate hazardous material waste.
 2. Loose lead-based paint on floors and horizontal surfaces (e.g., paint chips or dust) shall be removed via dry methods, such as via HEPA vacuum.
 3. Removal / abatement shall be performed within a full enclosure. Enclosure air control systems shall not exhaust air to interior building areas or where workers could be present.
 4. If chemicals are utilized, the Contractor shall provide the Owner safety data sheets and manufacturer specifications for review and approval at a minimum of two weeks prior to performing the Work.
 5. The Contractor shall notify the Owner of chemicals, such as solvents, or aides used in paint removal.
 6. When water is used, spent fluids shall not be reused.

- E. Collected lead-painted materials shall be managed at the Jobsite until waste characterization data is received and arrangements for transportation and disposal are complete. Lead wastes shall be stored and managed under safety precautions of hazardous waste until documented to be nonhazardous. Contaminated materials of different types, such as paint chips versus debris, shall be managed separately. Wastes from different sources shall be managed separately.
- F. Paint / coating removal wastes (e.g., paint chips, etc.) must be placed in closed containers.
- G. Requirements for materials that may also contain asbestos, PCBs or other nonhazardous and hazardous materials are specified in Section 02 82 00 – Asbestos Abatement, Section 02 84 00 – PCB-Containing Material Removal, and Section 02 87 00 – Nonhazardous and Hazardous Waste Removal, respectively.
- H. The Contractor shall minimize generation of fugitive dust and odor during removal Work as specified in Section 01 56 16 – Dust and Odor Controls.

3.7 AIR MONITORING

- A. The Contractor shall perform air monitoring to determine appropriate safety and personal protective measures to be implemented during the performance of the Work. Monitoring of airborne concentrations of lead within and immediately outside the controlled Work area shall be in accordance with 29 CFR 1926.62.
- B. Air samples shall be collected daily during the removal of lead-coated materials from their substrate and lead-containing dust and debris. Air samples shall be collected within and exterior to each controlled Work area.
- C. Samples shall be submitted to an Owner-approved accredited laboratory under chain-of-custody procedures. Samples shall be analyzed by National Institute for Occupational Safety and Health Method 7105 on a 24-hour turnaround time.
- D. If lead is detected in excess of $30 \mu\text{g} / \text{m}^3$ in air samples collected exterior to the controlled Work area, the Contractor shall:
 - 1. Cease Work in the area(s) and evacuate all workers where samples were collected
 - 2. Notify the Owner immediately
 - 3. Implement additional controls necessary to contain lead dust within the Controlled Work Area(s)
- E. Analytical data shall be submitted to the Owner upon receipt from the laboratory and shall be maintained at the Jobsite.
- F. The Contractor will perform air sampling for lead during demolition Work as specified in Section 02 41 00 – Demolition.

3.8 WASTE CHARACTERIZATION

- A. Waste characterization and labeling shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.

3.9 LABELING

- A. Containers shall be labeled as specified in Section 01 74 00 – Cleaning and Waste Management.

3.10 TRANSPORTATION AND DISPOSAL

- A. Transportation and disposal shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.

3.11 DECONTAMINATION

- A. Decontamination shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.

3.12 INSPECTIONS

- A. Inspections shall be performed as outlined in Section 01 41 00 – Regulatory Requirements and Section 01 74 00 – Cleaning and Waste Management.

END OF SECTION

SECTION 02 84 00 – PCB-CONTAINING MATERIAL REMOVAL

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. The Contractor shall provide labor, equipment, materials, personal protective equipment (PPE), and environmental preventive measures necessary to perform the removal, management, and transportation and disposal of polychlorinated biphenyls (PCB) articles, items, containers, bulk product, and remediation waste as required for the Work including, but not limited to, the following:
1. Bulk product materials coated or serviced with PCBs, such as caulks, glazes, paints, and coatings containing PCBs
- B. Previous PCB Sampling and Further Investigation
1. Samples of paint and caulk were collected by the Owner and analyzed for PCBs in August 2022. Samples of caulk indicated PCB concentrations less than 10 parts per million (ppm). Samples of paint indicated PCB concentrations ranging between 0.96 and 50 ppm, with one detection (paint color) at the Toxic Substance Control Act (TSCA) limit of 50 ppm. Results from the sampling effort are included in Appendix A. Appendix A is not considered all inclusive. The Contractor shall be responsible for verifying locations, conditions, and removal of PCB containing materials as necessary, whether included in Appendix A or discovered during the Work, unless otherwise specified. The Contractor shall be responsible for appropriate identification and management and worker protections for all PCBs, whether or not identified in Appendix A.
 2. The Contractor shall not rely on previously collected data but shall have the duty to conduct its own surveying and inspection which it shall rely on in performing the Work. The Contractor shall collect samples from a broad survey of materials, as is prudent in the circumstances, to allow the Contractor to: (a) draw reasonable conclusions as to whether it has thoroughly addressed PCBs at the Jobsite, and (b) to confirm the presence / absence of PCBs in bulk materials such as caulks, glazing, paints, and coatings. The Owner shall be present when samples are collected.
 3. Samples shall be submitted to an Owner-approved accredited laboratory under chain-of-custody procedures and analytical results submitted to the Owner upon receipt.
- C. Dust and Debris
1. Significant amounts of dust and damaged building materials (debris) are on floor or other surfaces throughout the building, including areas where paint with concentrations of PCBs at 50 ppm (TSCA limit) is present. Paint throughout the structure is observed to be flaking and paint chips are present on ground surfaces, mixed with dust and other debris. Paint with PCB concentrations at or greater than 50 ppm that has separated from substrate is considered TSCA waste. TSCA waste comingled with other waste is considered TSCA waste. All dust and damaged

- building materials in areas where paint containing PCB concentrations at or greater than 50 ppm is present, and the paint is in a flaking condition, shall be removed managed, transported, and disposed of as TSCA waste.
2. It is important to note that a composite sample of various paint colors indicated lead at a toxicity characteristic leaching procedures (TCLP) concentration of 17 ppm, exceeding the hazardous waste limit 5 ppm. Paint on building materials and paint chips on surfaces mixed with dust and other debris may also be characteristically hazardous.
 3. It is important to note that some of the damaged building materials on floor or other surfaces are ACM or contaminated with ACM.
 4. The Contractor is to remove PCB-containing materials (bulk product, waste, etc.) prior to performing demolition as specified in Section 02 41 00 – Demolition and removal will require coordination with ACM abatement Work.
 5. Requirements for ACM and lead are specified in Section 02 82 00 – Asbestos Abatement and Section 02 83 00 – Lead Control and Removal, respectively.
- D. Following completion of additional sampling by the Contractor, the Contractor shall perform the following prior to commencing demolition:
1. With assistance from the Owner, identify all areas within the building where PCB-containing materials are located, also noting presence of lead-containing paint and ACMs
 2. Provide the Owner an execution strategy that details methodology and sequencing for removal of PCB bulk product, TSCA, and other PCB waste, considering lead-containing paint and ACMs that are also present and areas where unsafe building conditions may prevent pre-demolition removal
 3. Setup and maintain enclosures / containment and establish regulated areas per the execution strategy
 4. Protect adjacent surfaces within enclosures / containments as needed
 5. Remove damaged (flaking) PCB-containing paint from surfaces
 6. Remove any bulk product waste (PCB-containing caulks, glazing, paints, coatings, and associated porous substrate) without separating the PCB-containing material from the serviced building material
 7. Abate PCB-containing paint / coating in the area where torching, cutting, and / or grinding needs to be performed (if any), per PCB cleanup and disposal guidance in interpretive letters for 40 Code of Federal Regulations (CFR) 761
 8. Clean PCB residue on fixture surfaces, if any
 9. Place all PCB bulk product and remediation waste in approved disposal containers. Mark and label all disposal containers per US Department of Transportation (USDOT) regulatory requirements. Containers shall be managed separately from other wastes
- E. All PCB articles, items, containers, bulk product, and remediation waste shall be disposed offsite within 30 days of removal.
- F. Materials designated as waste with a PCB concentration of 50 ppm or greater are to be managed under TSCA and shall be disposed at an Owner-approved TSCA permitted facility.

- G. The Contractor shall transport and dispose PCB bulk product, and remediation waste utilizing Owner-approved transportation contractors and disposal facilities.
- H. The Contractor shall remove, manage / store, transport, and dispose or recycle PCB bulk product, and remediation waste in accordance with these Technical Specifications and all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
 - 1. Section 01 32 00 – Project Controls Requirements
 - 2. Section 01 33 00 – Submittal Procedures
 - 3. Section 01 35 13 – Special Project Procedures
 - 4. Section 01 41 00 – Regulatory Requirements
 - 5. Section 01 71 00 – Jobsite Preparation
 - 6. Section 01 74 00 – Cleaning and Waste Management
 - 7. Section 02 00 00 – Existing Conditions
 - 8. Section 02 41 00 – Demolition
 - 9. Section 02 82 00 – Asbestos Abatement
 - 10. Section 02 83 00 – Lead Control and Removal
- B. Work outlined in this Section shall be performed in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. References to regulatory requirements are included in Section 01 41 00 – Regulatory Requirements.

1.3 SUBMITTALS

- A. Work to be performed for further investigation for presence / absence of PCBs and removal of PCB-containing materials shall be outlined in appropriate Work plans specified in Section 01 35 13 – Special Project Procedures.
- B. Work performed during the sampling and removal of PCB-containing materials shall be summarized in the weekly progress report, as specified in Section 01 32 00 – Project Controls Requirements, and in the construction summary report, as specified in Section 01 35 13 – Special Project Procedures.
- C. Completed inspection forms, as specified in Section 01 41 00 – Regulatory Requirements and Section 01 74 00 – Cleaning and Waste Management.
- D. Weekly waste inventories, as specified in Section 01 74 00 – Cleaning and Waste Management.

- E. Submittals associated with analytical for waste characterization and profiling and waste transportation and disposal documentation (e.g., waste manifests) is specified in Section 01 74 00 – Cleaning and Waste Management. In addition to requirements specified in Section 01 74 00 – Cleaning and Waste Management, PCB waste documentation shall also include the following:
 - 1. Type of waste
 - 2. Date removed from service
 - 3. Unique identification number or serial number (for PCB articles, items, and containers)
 - 4. Weight

- F. The Contractor shall provide copies of the completed certificates of destruction, prepared by the disposal facility, and final signed manifests within 10 days of the time at which the materials are destroyed.

- G. Upon completion of all PCB-related Work activities, the Contractor shall provide a complete record to the Owner that includes the following data:
 - 1. Name of the Contractor / Subcontractor performing the PCB Work and the technician in charge.

 - 2. PCB bulk product waste removed:
 - a. Container size
 - b. Identification of contents
 - c. Weight in kilograms of contents of each container

 - 3. PCB remediation waste:
 - a. Container size
 - b. Identification of contents, i.e., soil, concrete, etc.
 - c. Weight in kilograms of contents of each container
 - d. Date items were destroyed and location

- H. Submittals shall be provided as required in Section 01 33 00 – Submittal Procedures.

PART 2 – PRODUCTS

2.1 EQUIPMENT

- A. The Contractor shall provide, power, operate, control, and maintain all equipment necessary for the performance of the Work. Equipment shall be operated and maintained in accordance with manufacturer's recommendations and requirements.

2.2 CONTAINERS AND PACKAGING

- A. The Contractor shall provide USDOT-compliant containers in good condition, empty, and clean (decontaminated of formerly stored materials). Containers include drums, as required

for small quantity containerization, or roll-off boxes for larger quantities of materials. Containers shall be made of materials compatible with the type of waste(s) being stored.

2.3 MATERIALS

- A. The Contractor shall provide all necessary materials to perform the Work. Materials shall be delivered to the Jobsite; handled, stored, and protected; and utilized as specified by manufacturer's recommendations and requirements.

2.4 SIGNAGE

- A. The Contractor shall provide and install signage for storage areas, containers, and transportation vehicles as required by Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.

2.5 SPILL RESPONSE

- A. The Contractor shall provide appropriate spill response materials including, but not limited to the following: containers, absorbents, shovels, and PPE. Spill response materials shall be available at all times when contaminated materials / wastes are being handled or transported. Spill response materials shall be compatible with the type of materials and contaminants being handled.

PART 3 – EXECUTION

3.1 NOTIFICATIONS

- A. The Contractor shall notify the Owner prior to commencing Work that will generate PCB waste.
- B. The Contractor shall notify the Owner immediately when regulatory agency and / or local municipal representatives are present at the Jobsite.

3.2 EXISTING CONDITIONS

- A. The Contractor shall evaluate existing conditions in areas of Work as specified in Section 02 00 00 – Existing Conditions to identify, evaluate, control, and mitigate hazards present or that may be encountered during the Work.
- B. In general, paint on surfaces is in poor condition and is peeling. Paint chips are present on ground and other surfaces. A TCLP lead concentration of 17 ppm was detected in a composite paint sample collected in August 2022, which exceeds the hazardous waste limit of 5 ppm. Significant amounts of damaged building materials are also on floor and other surfaces throughout the building. Some of the damaged building materials on the floor are ACM or contaminated with ACM.

3.3 HEALTH AND SAFETY

- A. Work Area Protection and Marking
 - 1. Prior to commencing any PCB related Work activities, the Contractor shall provide barricades and warning signs to clearly identify and effectively guard against unauthorized entry into Work area.

- B. Protective Clothing and Equipment
 - 1. At all times when PCB materials in any volume are not sealed in drums, containers or electrical equipment, workers shall wear at a minimum:
 - a. Disposable, non-porous gloves
 - b. Disposable whole-body clothing impermeable to PCBs
 - c. Respiratory protection (National Institute for Occupational Safety and Health [NIOSH] / Mine Safety and Health Administration [MSHA] approved) against organic vapors and particles
 - d. Eye protection

- C. Personnel Protection and Procedures
 - 1. The PCB Work area shall at no time be left unattended after procedures have begun and until all PCB articles, such as ballasts, capacitors, transformers, bulk product, and remediation waste, and incidentals have been sealed in approved containers.
 - 2. If immediate transportation to the disposal facility is not feasible, the Work area must be secured in a manner approved by the Owner.
 - 3. During procedures and at all times when PCB articles or mixtures in any volume are not sealed in drums, containers or electrical equipment, all personnel entering the Work area must don protective clothing and equipment listed herein.
 - 4. Upon exiting the Work area, all disposable protective clothing shall be placed in open-top drums, sealed, and removed from building property when other materials in same areas are removed.

- D. When PCB bulk product waste also contains asbestos or lead and / or other metals, the Contractor shall coordinate activities as specified in Section 02 82 00 – Asbestos Abatement and Section 02 83 00 – Lead Control and Removal.

3.4 SPILL RESPONSE

- A. The Contractor shall respond to a spill as specified in Section 01 74 00 – Cleaning and Waste Management and as specified herein.

- B. The Contractor shall immediately notify the Owner of any spill involving PCB.

- C. Where slabs, floors or walls have come in contact with PCB fluids, they shall be scraped clean, flushed with approved solvent, wiped clean and all debris placed in open type drums and sealed.

- D. Liquids shall be collected with absorbent materials. Absorbent materials shall be placed in closed top drums and sealed.
- E. All other solids such as sorbents, rags, disposable protective clothing and other incidentals shall be placed in open top drums and sealed.
- F. All equipment and tools that may have come in contact with PCBs at any concentration shall be thoroughly flushed with solvent, wiped clean and properly stored.
- G. Cleaning solvents and wipes shall be disposed offsite as PCB waste at a facility approved by the Owner.

3.5 SCREENING

- A. A sampling report for PCBs and lead is provided in Appendix A. Details provided in Appendix A are not considered all inclusive. As part of the Work, the Contractor shall identify, remove, manage, transport and dispose of all PCB-containing material encountered during the execution of the Work, whether identified in previous sampling efforts or not.
- B. The Contractor shall collect additional representative samples of potential PCB articles, items, containers, and / or bulk product to confirm the presence / absence of PCBs in order to delineate areas where PCBs are present. The Owner shall be present during the sampling effort. The number of samples shall be those required by Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work and those required by the disposal facility and Owner.
- C. Initial screening for presence / absence of PCBs does not alleviate the requirement for the Contractor to ensure that all materials transported offsite as non-PCB are in fact non-PCB.
- D. Samples shall be submitted to an Owner-approved accredited laboratory under chain-of-custody procedures.
- E. Analytical data shall be submitted to the Owner upon receipt from the laboratory.

3.6 MATERIAL REMOVAL AND HANDLING

- A. The Contractor shall remove PCB articles, items, containers, and bulk product from the Jobsite prior to performing demolition Work, unless otherwise specified.
- B. The Contractor shall properly collect and separate PCB items by the following PCB concentrations:
 - 1. Less than 2 ppm of PCBs
 - 2. Greater than 2 ppm and less than 50 ppm of PCBs
 - 3. Greater than 50 ppm and less than 500 ppm of PCBs
 - 4. Greater than 500 ppm of PCBs

- C. The Contractor shall remove PCB-containing building materials and associated porous substrates as bulk product or remediation waste in accordance with 40 CFR 761.62. These materials may include:
1. Caulking and grout in floor and wall joists
 2. Oil-based paint coating on floors and walls
 3. Mastic and adhesives used under flooring (tiles and carpets)
 4. Sealants and finishing used on flooring
 5. Gaskets around windows and doors in heating, ventilation, and air condition systems and ducting
 6. Window glazing
 7. Roofing and siding
 8. Plastics (such as plastic insulation from wire or cable; or furniture laminates)
 9. Preformed or molded rubber parts and components
 10. Applied dried paints, varnishes, waxes or other similar coatings or sealants
 11. Miscellaneous caulking
 12. Non-liquid building demolition debris
- D. PCB Paint and Coatings
1. For oil-based paint coating or applied dried paints, varnishes, waxes or other similar coatings or sealants on floors, walls, ceilings, wood, steel, or other building items, the Contractor shall perform one of the following options. The Contractor shall take into consideration the cost to perform each option and the Owner's preference to maximize the recycling of materials.
 - a. For Concentrations Less than 50 ppm
 - i. Abate / remove PCB-containing layer(s) and underlying porous substrate (if present) via dry or wet removal techniques to recycle the underlying construction material
 - ii. Remove and dispose the combined PCB paint / coating and construction material in a landfill that is regulated to dispose the waste
 - b. For Concentrations at or Greater than 50 ppm
 - i. Remove and transport the combined PCB paint / coating and underlying construction material as a PCB bulk product waste in a landfill that is regulated to dispose the waste
 - ii. Remediate the PCB-containing layer(s) and underlying porous substrate (if present) via dry or wet removal techniques to recycle the underlying construction material; the removed layer is PCB remediation waste and the remediated surface will need to be sampled per 40 CFR 761 to confirm removal of PCBs
 2. Requirements for dry and wet removal techniques are specified in Section 01 74 00 – Cleaning and Waste Management. Dry scraping, sanding, or grinding on or power washing PCB-containing paints / coatings or PCB contaminated surfaces shall not be permitted without a full enclosure. The Contractor shall notify Owner of chemicals or aides used in paint / coating removal such as solvents. The Contractor shall select a removal method that minimizes the amount of PCB waste.

- E. PCB bulk product waste removal shall be performed in a manner that limits, to the extent feasible, the amount of PCB bulk product waste and remediation waste. Wastes shall be disposed as specified in this Section.

- F. Storage
 - 1. All PCB waste shall be disposed offsite within 30 days of removal from service.
 - 2. All PCB articles, items and containers (except bulk product waste) shall be stored in designated storage areas as follows:
 - a. Temporary Storage
 - i. PCB articles, items, and containers can be stored for up to 30 days from the date removed from service.
 - ii. The storage area cannot be located within a 100-year flood plain zone.
 - iii. The storage area must be marked with a USEPA PCB large mark label.
 - iv. The storage area must have an impermeable floor with secondary containment (minimum 6-inch-high curbing) and no drains, expansion joints, or other openings.
 - v. The volume of the secondary containment must equal at least two times the volume of the largest PCB article or 25 percent of the total volume of all PCB articles, whichever is greater.
 - vi. All containers must be marked with USEPA PCB large mark labels.
 - 3. PCB-containing bulk product waste shall be segregated and stored in closed containers for transport and offsite disposal in accordance with 40 CFR 761.62.
 - 4. Immediately following unloading of PCB items, articles, and containers from the transport vehicle to the temporary storage area, the cargo area of the vehicle shall be inspected to check for any fluid leaks. If any fluid leaks are found, the source of the leaking container, (e.g., drum), or item shall be identified and sealed. The contaminated cargo area shall be thoroughly cleaned with sorbents, solvents and liquid cleaner. Cleaning solvents and solids shall be placed in containers, (e.g., drums), sealed, and marked.

- G. Containerization
 - 1. All liquids generated as a result of Work activities and cleanup operations shall be placed in closed top drums and sealed.
 - 2. All solids such as sorbents, rags, disposable protective clothing and other incidentals shall be placed in open top drums and sealed.

3.7 WASTE CHARACTERIZATION

- A. Waste characterization shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.

3.8 LABELING

- A. All containers (e.g., drums where used) shall be permanently marked with the USEPA PCB large mark labels that include the following:
 - 1. Contents (type of waste)
 - 2. Date removed from service
 - 3. Unique identification number or serial number (for PCB articles, items, and containers)
 - 4. Weight
 - 5. PCB concentration (e.g., 50 ppm PCB or greater)
- B. All PCB articles, items, and containers shall have a record sealed in a weatherproof envelope displayed on the unit. The label record must include the type of action taken, date of action and the name of the technician in charge.
- C. Additional waste labeling requirements are specified in Section 01 74 00 – Cleaning and Waste Management.

3.9 TRANSPORTATION AND DISPOSAL

- A. Transportation and disposal shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.
- B. All materials designated as waste with a PCB concentration of 50 ppm or greater are to be managed under TSCA and shall be disposed offsite at an Owner-approved TSCA permitted facility. Materials designated as waste with a PCB concentration less than 50 ppm shall be disposed offsite at an Owner-approved disposal facility that is able to accept materials with PCB concentrations less than 50 ppm.
- C. PCB articles, items, and / or containers rejected for recycling are the responsibility of the Contractor to dispose at the Contractor's expense.
- D. The Contractor shall use a continuation sheet with each PCB manifest including the following information:
 - 1. For each bulk load of PCBs, the identity of the PCB waste, the earliest date of removal from service for disposal, and the weight in kilograms of the PCB waste.
 - 2. For each PCB article, item, and container the unique identifying number, type of PCB waste (e.g., small capacitors), earliest date of removal from service for disposal, and weight in kilograms of the PCB waste contained.
 - 3. For each PCB article not in a PCB container, the serial number if available, or other identification if there is no serial number, the date of removal from service for disposal, and weight in kilograms of the PCB waste in each PCB article, item, and container.

- E. Trucks shall be plainly and visibly marked with a minimum of four USEPA PCB large mark labels if carrying PCB articles, items or containers that contain more than 99 pounds of liquid PCBs at concentrations greater than 50 ppm or carrying one or more PCB transformers. Only placard the truck if shipping greater than the reportable quantity of one pound of PCBs.

3.10 DECONTAMINATION

- A. Decontamination shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.
- B. All equipment and tools that may have come in contact with PCB at any concentration shall be thoroughly flushed with solvent, wiped clean and properly stored. Small equipment, tools, and other materials for which decontamination is difficult or uncertain, such as sorbent pads, PPE, etc. shall be containerized and disposed offsite as PCB waste at a facility approved by the Owner.

3.11 INSPECTIONS

- A. Inspections shall be performed as outlined in Section 01 41 00 – Regulatory Requirements and Section 01 74 00 – Cleaning and Waste Management.

END OF SECTION

SECTION 02 87 00 – NONHAZARDOUS AND HAZARDOUS WASTE REMOVAL

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. The Contractor shall provide all labor, equipment, materials, and personal protective equipment (PPE) necessary to perform the removal, management, storage, transportation and offsite disposal of all other wastes not specifically discussed in other Sections of these Technical Specifications to complete the demolition Work.
- B. The Contractor's employees involved with the removal, handling, labeling, storage, and transportation, of nonhazardous and hazardous wastes (excluding polychlorinated biphenyl [PCB]-containing materials, see Section 02 84 00 – PCB-Containing Material Removal) shall have received hazard communication and management training for hazardous wastes.
- C. A *Pre-Demolition Site Characterization* survey report and supplemental sampling report is provided in Appendix A. Details provided in Appendix A are not considered all inclusive. The Contractor shall be responsible for verifying locations, conditions, and removal of hazardous and nonhazardous waste as necessary, whether included in the previous sampling efforts or discovered during the Work, unless otherwise specified. The Contractor shall be responsible for appropriate identification and management and worker protections for all wastes.
- D. Wastes that are detailed in this Section include, but are not limited to the following:
 - 1. Tires
 - 2. One gallon or less containers of mineral spirits, sealants, oil, insecticides, or other chemicals
 - 3. Fluorescent light bulbs possibly containing mercury
 - 4. Fluorescent light ballasts
 - 5. Exit signs which may contain tritium which could be released if sign is broken
 - 6. Electrical equipment: TVs and appliances
 - 7. Other solid waste materials
- E. Removal of asbestos-containing material (ACM), lead-coated materials, and PCBs are detailed in Section 01 74 00 – Cleaning and Waste Management, Section 02 82 00 – Asbestos Abatement, Section 02 83 00 – Lead Control and Removal, and Section 02 84 00 – PCB-Containing Material Removal, respectively.
- F. The Contractor shall be responsible for verifying quantities, types, locations, and conditions of materials when removal is required, as well as any other necessary information, to perform the Work, and coordinating with the Owner for management of nonhazardous wastes and hazardous wastes.

- G. The Contractor shall collect samples of materials for waste characterization purposes, if required based on the type of waste and debris found. Samples shall be submitted to an Owner-approved accredited laboratory under chain-of-custody procedures. Waste characterization, profiling, and approval is the responsibility of the Contractor and shall be coordinated between the Owner, the disposal facility, and the Contractor. All waste profiles shall be submitted to the Owner for approval prior to submission to the disposal facility. All waste and recyclable materials must be managed through Owner-approved disposal and recycling facilities.
- H. Nonhazardous, hazardous, and pending wastes shall be managed and stored at the Jobsite until waste characterization data is received, where required. Wastes of different types from different sources shall be managed separately.
- I. The removal, management, storage, transportation and offsite disposal of wastes shall be performed in accordance with these Technical Specifications and all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
 - 1. Section 01 32 00 – Project Controls Requirements
 - 2. Section 01 33 00 – Submittal Procedures
 - 3. Section 01 35 13 – Special Project Procedures
 - 4. Section 01 41 00 – Regulatory Requirements
 - 5. Section 01 74 00 – Cleaning and Waste Management
 - 6. Section 02 00 00 – Existing Conditions
 - 7. Section 02 82 00 – Asbestos Abatement
 - 8. Section 02 83 00 – Lead Control and Removal
 - 9. Section 02 84 00 – PCB-Containing Material Removal
 - 10. Section 02 88 00 – Universal Waste Removal
- B. Work outlined in this Section shall be performed in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. References to regulatory requirements are included in Section 01 41 00 – Regulatory Requirements.

1.3 SUBMITTALS

- A. Work to be performed for waste removal shall be outlined in appropriate Work plans specified in Section 01 35 13 – Special Project Procedures.
- B. Work performed during the removal of wastes shall be summarized in the weekly progress report, as specified in Section 01 32 00 – Project Controls Requirements, and in the construction summary report, as specified in Section 01 35 13 – Special Project Procedures.

- C. Completed inspection forms, as specified in Section 01 41 00 – Regulatory Requirements and Section 01 74 00 – Cleaning and Waste Management.
- D. Weekly waste inventories as specified in Section 01 74 00 – Cleaning and Waste Management.
- E. Submittals associated with analytical for waste characterization and profiling and waste transportation and disposal documentation (e.g., waste manifests) is specified in Section 01 74 00 – Cleaning and Waste Management.
- F. Submittals shall be provided as required in Section 01 33 00 – Submittal Procedures.

PART 2 – PRODUCTS

2.1 EQUIPMENT

- A. The Contractor shall provide, power, operate, control, and maintain all equipment necessary for the performance of the Work. Equipment shall be operated and maintained in accordance with manufacturer's recommendations and requirements.

2.2 CONTAINERS AND PACKAGING

- A. The Contractor shall provide US Department of Transportation (USDOT)-compliant containers in good condition, empty, and clean (decontaminated of previously stored materials). Containers shall be made of materials compatible with the type of waste(s) being stored and transported.

2.3 SAFETY AND SIGNAGE

- A. The Contractor shall provide and install signage for nonhazardous and hazardous collection and storage areas, labels and markings for containers, and placards for transportation vehicles as required by Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.

2.4 SPILL RESPONSE

- A. The Contractor shall provide appropriate spill response materials including, but not limited to the following: containers, absorbents, shovels, and PPE. Spill response materials shall be available at all times when contaminated materials / wastes are being handled or transported. Spill response materials shall be compatible with the type of materials and contaminants being handled.

PART 3 – EXECUTION

3.1 NOTIFICATIONS

- A. The Contractor shall notify the Owner prior to commencing new Work tasks.

- B. The Contractor shall notify the Owner immediately when regulatory agency and / or local municipal representatives are present at the Jobsite.

3.2 EXISTING CONDITIONS

- A. The Contractor shall evaluate existing conditions in areas of Work as specified in Section 02 00 00 – Existing Conditions to identify, evaluate, control, and mitigate hazards present or that may be encountered during the Work.

3.3 HEALTH AND SAFETY

- A. Training:
 - 1. The Contractor shall be responsible for assuring the following training has been completed prior to the commencement of Work:
 - a. Hazard communication and material handling for hazardous and universal wastes
 - b. Container labeling, collection, and storage for hazardous and universal wastes
 - c. Special training on equipment and procedures unique to the Jobsite shall be performed as required
 - d. Training in emergency response procedures

3.4 SPILL RESPONSE

- A. The Contractor shall respond to a spill as specified in Section 01 74 00 – Cleaning and Waste Management.

3.5 INSPECTIONS FOR WASTE

- A. It is the responsibility of the Contractor to perform inspections of the Work area to identify, collect, handle, store, characterize, and dispose / recycle materials present at the Jobsite that must be removed to complete the demolition Work.
- B. Miscellaneous chemical containers may be present throughout the building. The contents of any bulk containers shall be assumed to be unknown, regardless of labeling. The Owner is not able to provide a generator's statement of knowledge for any chemicals present onsite. As such, the Contractor shall collect samples to properly characterize the material. Sample analytes shall be determined based on the requirements of the Owner, the requirements of the disposal facility, and any applicable Federal, State, local laws, ordinances, codes, rules and regulations.
- C. Miscellaneous debris may be present throughout the building, including but not limited to auto parts, books, tools, and other miscellaneous items. The Contractor shall dispose of these items in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations.

- D. The Owner will not be responsible nor held liable for costs associated with identifying the location, quantity, condition, or classification of waste identified onsite requiring removal.
- E. When encountered, materials shall be removed and handled as specified in this Section and other applicable Sections (see Section 01 74 00 – Cleaning and Waste Management, Section 02 82 00 – Asbestos Abatement, Section 02 83 00 – Lead Control and Removal, Section 02 84 00 – PCB-Containing Material Removal, and Section 02 88 00 – Universal Waste Removal). Residuals and residues shall be cleaned as specified in Section 01 74 00 – Cleaning and Waste Management.

3.6 WASTE REMOVAL AND HANDLING

- A. The Contractor shall remove wastes from the Jobsite in a manner that prevents releases of nonhazardous and hazardous materials to the ground surface outside the current onsite building.
- B. Wastes collected shall be identified, segregated, sorted and placed in separate USDOT-compliant containers in good condition, empty, and clean (decontaminated of previously stored materials), as needed for offsite transport and appropriate disposal. Containers include drums, tubes, boxes, crates, and pallets, as required for small quantity containerization and roll-off containers for larger quantities of materials.
- C. Containers shall be made of materials compatible with the type of waste(s) being stored. Containers shall be closed except when adding or removing waste.
- D. All containers storing liquids shall be placed on / in a secondary containment system, contain no leaks or punctures, equipped with proper valves and gaskets, and be fully closed when not actively filling / emptying contents. The Contractor shall provide all necessary labor, materials, and other costs for the maintenance and repair of each container.
- E. Roll-off containers shall be sealed to prevent leaking of liquids and covered when not in use. Lined roll-offs shall be used as needed.
- F. It is the responsibility of the Contractor to ensure wastes are segregated as appropriate to meet waste disposal requirements.
- G. Wastes shall be managed and stored at the Jobsite until waste characterization data is received. Materials shall be removed, segregated, staged, and otherwise prepared for disposal in such a manner that the wastes are fully contained, protected from weather or other adverse conditions, and do not pose a threat to concurrent demolition operations.
- H. The Owner encourages recycling to the maximum extent possible. Removal of staining and / or coatings shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.

3.7 WASTE CHARACTERIZATION

- A. Waste characterization shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.

3.8 LABELING

- A. Containers shall be labeled as specified in Section 01 74 00 – Cleaning and Waste Management.

3.9 TRANSPORTATION AND DISPOSAL

- A. Transportation and disposal shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.

3.10 DECONTAMINATION

- A. Decontamination shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.

3.11 INSPECTIONS

- A. Inspections shall be performed as outlined in Section 01 41 00 – Regulatory Requirements and Section 01 74 00 – Cleaning and Waste Management.

END OF SECTION

SECTION 02 88 00 – UNIVERSAL WASTE REMOVAL

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. The Contractor shall supply all labor, materials, equipment, personal protective equipment (PPE), vehicles, services, and insurance necessary to remove, package, label, and store, transport, and recycle universal wastes. Some universal wastes present at the Jobsite are listed in the *Pre-Demolition Site Characterization* survey report included in Appendix A. The Work will also include any additional universal waste identified during the performance of the Work.
- B. The Federal universal waste regulations are found in 40 Code of Federal Regulations (CFR) Part 273 and apply to five types of universal waste: batteries, pesticides, mercury-containing equipment, lamps and aerosol cans. Universal wastes in Illinois, listed in 35 Illinois Administrative Code (IAC) Part 733 include batteries (e.g., certain lead-acid batteries not recycled under other regulations; button silver-oxide and zinc-air; and 9-volt, C, AA, coin, and button rechargeable lithium); pesticides; mercury containing devices (e.g., thermostats, switches); electric lamps (e.g., fluorescent, high intensity discharge, sodium vapor, and mercury vapor) and aerosol cans.
- C. The Contractor's employees involved with the removal, handling, storage, transportation, and recycling of universal wastes (excluding polychlorinated biphenyl [PCB]-containing materials, see Section 02 84 00 – PCB-Containing Material Removal) shall receive hazard communication and management training on identification and proper handling of universal wastes.
- D. The Work specified herein shall be the removal, packaging, labeling, storage, transportation, and recycling of universal wastes removed within the Jobsite. The Contractor shall be responsible for verifying quantities, types, locations, and conditions of materials covered within this Section, as well as any other necessary information, to perform the Work.
- E. If necessary for disposal, the Contractor shall collect samples of materials for waste characterization purposes as necessary. Samples shall be submitted to an Owner-approved accredited laboratory under chain-of-custody procedures. Waste characterization, profiling, and approval is the responsibility of the Contractor and shall be coordinated between the Owner, the disposal facility, and the Contractor. All waste and recyclable materials must be managed through Owner-approved disposal and recycling facilities.
- F. Universal waste Work shall be performed in accordance with these Technical Specifications and all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
1. Section 01 32 00 – Project Controls Requirements
 2. Section 01 33 00 – Submittal Procedures
 3. Section 01 35 13 – Special Project Procedures
 4. Section 01 41 00 – Regulatory Requirements
 5. Section 01 74 00 – Cleaning and Waste Management
 6. Section 02 00 00 – Existing Conditions
 7. Section 02 84 00 – PCB-Containing Material Removal
 8. Section 02 87 00 – Nonhazardous and Hazardous Waste Removal
- B. Work outlined in this Section shall be performed in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. References to regulatory requirements are included in Section 01 41 00 – Regulatory Requirements.

1.3 SUBMITTALS

- A. Work to be performed for universal waste removal shall be outlined in appropriate Work plans specified in Section 01 35 13 – Special Project Procedures.
- B. Work performed during the removal of universal wastes shall be summarized in the weekly progress report, as specified in Section 01 32 00 – Project Controls Requirements, and in the construction summary report, as specified in Section 01 35 13 – Special Project Procedures.
- C. Completed inspection forms, as specified in Section 01 41 00 – Regulatory Requirements and Section 01 74 00 – Cleaning and Waste Management
- D. Weekly waste inventories, as specified in Section 01 74 00 – Cleaning and Waste Management.
- E. Submittals associated with analytical for waste characterization and profiling and waste transportation and disposal documentation (e.g., waste manifests) is specified in Section 01 74 00 – Cleaning and Waste Management.
- F. Submittals shall be provided as required in Section 01 33 00 – Submittal Procedures.

PART 2 – PRODUCTS

2.1 EQUIPMENT

- A. The Contractor shall provide, power, operate, control, and maintain all equipment necessary for the performance of the Work. Equipment shall be operated and maintained in accordance with manufacturer's recommendations and requirements.

2.2 CONTAINERS AND PACKAGING

- A. The Contractor shall provide US Department of Transportation (USDOT)-compliant containers in good condition, empty, and clean (decontaminated of previously stored materials). Containers include drums, boxes, tubes, pallets, and crates as appropriate and required for small quantity containerization. Containers shall be made of materials compatible with the type of waste(s) being stored.

2.3 TRANSPORTATION

- A. The Contractor shall provide Owner-approved, USDOT-compliant transport vehicles in good condition, empty, and clean (decontaminated of previously hauled materials).

2.4 MATERIALS

- A. The Contractor shall provide all necessary materials to perform the Work. Materials shall be delivered to the Jobsite; handled, stored, and protected; and utilized as specified by manufacturer's recommendations and requirements.

2.5 SAFETY AND SIGNAGE

- A. The Contractor shall provide and install signage for universal waste collection and storage areas, labels and markings for containers, and placards for transportation vehicles as required by Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.

2.6 SPILL RESPONSE

- A. The Contractor shall provide appropriate spill response materials including, but not limited to the following: containers, absorbents, shovels, and PPE. Spill response materials shall be available at all times when contaminated materials / wastes are being handled or transported. Spill response materials shall be compatible with the type of materials and contaminants being handled.

PART 3 – EXECUTION

3.1 NOTIFICATIONS

- A. The Contractor shall notify the Owner prior to commencing new Work tasks.

- B. The Contractor shall notify the Owner immediately when regulatory agency representatives are present at the Jobsite.

3.2 EXISTING CONDITIONS

- A. The Contractor shall evaluate existing conditions in areas of Work as specified in Section 02 00 00 – Existing Conditions to identify, evaluate, control, and mitigate hazards present or that may be encountered during the Work.

3.3 HEALTH AND SAFETY

- A. Training:
 - 1. The Contractor shall be responsible for assuring the following training has been completed prior to the commencement of Work:
 - a. Hazard communication and material handling for hazardous and universal wastes
 - b. Container labeling, collection, and storage for hazardous and universal wastes
 - c. Special training on equipment and procedures unique to the Jobsite
 - d. Training in emergency response procedures

3.4 SPILL RESPONSE

- A. The Contractor shall respond to a spill as specified in Section 01 74 00 – Cleaning and Waste Management.

3.5 MATERIAL REMOVAL AND HANDLING

- A. Materials shall be removed in a manner that does not damage the waste. Universal waste (e.g., used lamps, used batteries, used aerosols, used mercury-containing devices) that is not maintained in an intact condition reverts to being Hazardous Material waste per USEPA RCRA regulations and shall be managed, transported, and disposed by the Contractor as Hazardous Material waste. No additional compensation shall be due to the Contractor for failure to maintain universal waste in an intact condition from the point it is removed from its location to the point it is delivered to the receiving facility.
- B. Universal waste shall be placed in appropriately labelled containers that will prevent damage to the materials during handling and transportation. Materials of different types shall be containerized and managed separately.
- C. Damaged or deteriorating materials shall be managed and disposed offsite as Hazardous Material waste, as appropriate.
- D. Universal waste containers shall be moved from the point of material removal to a main collection and storage area in a manner that prevents breakage and container damage. Collection containers shall be managed in a manner to ensure wastes are secure, protected from weather and to prevent releases to the environment.

- E. The Contractor shall designate and maintain waste collection and storage areas that are appropriately sized, designed and constructed in a manner to ensure wastes are secure, protected from weather and to prevent releases to the environment.
- F. The Contractor shall keep waste containers closed except when adding or removing waste.
- G. Requirements for nonhazardous and Hazardous Material waste are specified in Section 02 87 00 – Nonhazardous and Hazardous Waste Removal.

3.6 LABELING

- A. Containers shall be labeled as specified in USEPA 40 CFR 273 and 35 IAC Part 733.

3.7 TRANSPORTATION AND RECYCLING

- A. Transportation and disposal shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.

3.8 DECONTAMINATION

- A. Decontamination shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.

3.9 INSPECTIONS

- A. Inspections shall be performed as outlined in Section 01 41 00 – Regulatory Requirements and Section 01 74 00 – Cleaning and Waste Management.

END OF SECTION

SECTION 31 20 00 – EARTHWORK

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. The Contractor shall provide all labor, equipment, materials, treatment, controls, and personal protective equipment (PPE) necessary to complete ground intrusive and earthwork activities including, but not limited to, the following:
1. Clearing and grubbing
 2. Installing temporary underground utilities, if required for Contractor trailer(s)
 3. Excavations necessary for the demolition, removal, or abandonment of below grade features including:
 - a. Foundations of structures and other Jobsite features
 - b. Storm sewer catch basin and sanitary manhole structures
 - c. Underground utilities and piping
 4. Backfilling and compacting for excavations and below grade features
 5. Filling and grading above existing grade to restore disturbed areas in a manner that promotes drainage of storm water
- B. Prior to performing ground intrusive Work, the Contractor shall perform utility locating as specified in Section 01 71 00 – Jobsite Preparation and erosion and sediment controls shall be installed as specified in Section 01 57 13 – Temporary Erosion and Sediment Controls. The Contractor shall utilize soft digging via hydro vacuum or air knife equipment to initially identify and trace underground utilities in the area of ground intrusive Work.
- C. The Contractor shall have onsite an excavation competent person (as defined by 29 Code of Federal Regulations [CFR] 1926) at all times when ground intrusive Work is being performed to assess stability of soils during excavation Work. Excavation Work shall cease immediately, and the Owner notified when additional excavation may impact, in the opinion of the Contractor, the stability of features that are to remain in place, such as utility structures / poles, paved roadways, or if contaminated soils are encountered. The Contractor shall then consult with the Owner immediately for directions.
- D. The Contractor shall procure, transport, place, and grade / compact imported aggregate, fill, and topsoil as specified. Materials to be provided include, but are not limited to, the following:
1. Fill
 - a. Backfilling of excavations and basement to existing grade; backfilling shall be compacted as specified
 - b. Filling and grading above existing grade to restore disturbed areas in a manner that promotes drainage of storm water
 2. Topsoil
 - a. For all disturbed areas designated to be seeded and for final Jobsite restoration

- E. The Contractor shall stockpile and re-use clean and suitable soils as specified.
- F. Grading shall be performed in all restored disturbed areas.
- G. During earthwork Work the Contractor shall control soil erosion as specified in Section 01 57 13 – Temporary Erosion and Sediment Controls. The Contractor shall maintain and inspect earthwork and controls as specified.

1.2 DEFINITIONS

- A. Definitions relevant to earthwork include the following:
 - 1. *Cohesionless soils*: Gravels, sand-gravel mixtures, sands, and gravelly-sands, classified as GW, GP, SW, or SP by the Unified Soil Classification System (ASTM International [ASTM] D 2487). Testing required for the classification of soil shall be in accordance with ASTM D 4318, ASTM C 136, ASTM D 6913, and ASTM D 7928.
 - 2. *Cohesive soils*: Cohesive soils include clayey gravels, sand-clay mixtures, clayey sands, clays, and silts, classified as GC, SC, CL, CH, ML, or MH by the Unified Soil Classification System (ASTM D 2487). Soils classified as GM and SM will be identified as cohesionless only when the “finer” are determined to be non-plastic. Testing required for the classification of soil shall be in accordance with ASTM D 4318, ASTM C 136, ASTM D 6913, and ASTM D 7928.
 - 3. *Contaminated soils / materials*: Soils / materials that contain contaminants as defined by the 35 Illinois Administrative Code (IAC) Section 742.
 - 4. *Degree of compaction*: Compaction required, expressed as a percentage of the maximum dry density, at the optimum moisture content. The maximum dry density and optimum moisture content shall be obtained by the test procedure presented in ASTM D 1557 (Modified Proctor).
 - 5. *Unsatisfactory soils / materials*: Unsatisfactory soils / materials include but are not limited to peat and / or highly organic soils (classified as OL, OH, or PT by ASTM D 2487), stumps / brush, trash, refuse, debris, frozen soils, rocks or other materials greater than six inches in any direction, saturated soils, fine-grained soils above their liquid limit at the time of compaction, and soils which when left in place are either too wet or too dry to compact, as determined by the Owner.
 - 6. *Satisfactory soil / material*: Satisfactory soils / materials shall meet the requirements specified herein and shall be used in areas as shown on the Drawings or as directed by the Owner. In addition, satisfactory soils / materials shall satisfy the following conditions:
 - a. Shall be free of all unsatisfactory soil / material conditions listed above
 - b. Shall be from offsite borrow sources and be free of materials greater than three inches in any direction, unless otherwise specified or approved by the Owner
 - c. The maximum particle size shall not exceed one half of the specified maximum lift thickness, unless otherwise specified
 - d. For backfilling of pre-trench excavations may consist of re-claimed soil cuttings from the pre-trenching provided it meets Site re-use criteria and does not contain significant percentages of construction debris or other unsatisfactory material, as directed by the Owner.

7. *Waste*: Waste shall mean any solid waste, trash, garbage or other material typically disposed of in landfills, and man-made materials.
8. *Construction demolition debris*: Demolition debris consists of concrete, brick, wood, metal, glass, any other deleterious former construction product. Demolition debris that is excavated from the pre-trench excavations, or any other excavation at the Site, shall not be used as backfill of trenches or excavations.

1.3 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:

1. Section 01 32 00 – Project Controls Requirements
2. Section 01 33 00 – Submittal Procedures
3. Section 01 35 13 – Special Project Procedures
4. Section 01 41 00 – Regulatory Requirements
5. Section 01 56 00 – Barriers and Enclosures
6. Section 01 56 16 – Dust and Odor Controls
7. Section 01 57 13 – Temporary Erosion and Sediment Controls
8. Section 01 71 00 – Jobsite Preparation
9. Section 01 72 00 – Surveying
10. Section 01 74 00 – Cleaning and Waste Management
11. Section 02 00 00 – Existing Conditions
12. Section 31 23 19 – Dewatering
13. Section 32 92 19 – Seeding

- B. The publications listed below form a part of this Section to the extent referenced. The most recent issue of each publication shall apply, unless otherwise noted. The publications are referred to in the text by the basic designation only.

1. ASTM
 - a. ASTM C 136: Sieve Analysis of Fine and Coarse Aggregates
 - b. ASTM D 1557: Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft³)
 - c. ASTM D 2216: Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soils and Rock by Mass
 - d. ASTM D 2487: Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System)
 - e. ASTM D 2974: Standard Test Methods for Moisture, Ash, and Organic Matter of Peat and Other Organic Soils
 - f. ASTM D 3740: Standard Practice for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction
 - g. ASTM D 4318: Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
 - h. ASTM D 5519: Standard Test Method for Particle Size Analysis of Natural and Man-Made Riprap Materials

- i. ASTM D 6913: Standard Test Methods for Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis
 - j. ASTM D 6938: Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)
 - k. ASTM D 7928: Standard Test Method for Particle-Size Distribution (Gradation) of Fine-Grained Soils Using the Sedimentation (Hydrometer) Analysis
 2. Illinois Department of Transportation (DOT) Standard Specifications for Road and Bridge Construction (2022)
 3. *Illinois Urban Manual* (2013)
- C. Work outlined in this Section shall be performed in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. References to regulatory requirements are included in Section 01 41 00 – Regulatory Requirements. The Contractor shall comply with all authorities having jurisdiction over the Work.
- D. Owner Files and Drawings
 1. A collection of Jobsite Drawings and other Owner information are included in Appendix B to provide the Contractor details of buildings, locations and details of utilities, and details on other features.
 2. Appendix B may not contain all pertinent details needed by the Contractor to perform the Work. It is the responsibility of the Contractor to request additional Drawings as necessary for the performance of the Work; however, due to the age of the school, additional Drawings may not be available. The Contractor shall have access to the Jobsite, as requested by the Contractor. Details on, and conditions of, structures and locations of underground utilities and structures shown on the Drawings and other provided documents are provided for informational purposes only and it is not to be inferred that the details, conditions, and locations shown / provided are precise or that all existing conditions are depicted or detailed. It is the Contractor's responsibility to verify details, locations, and conditions prior to performing the Work.

1.4 SUBMITTALS

- A. Work to be performed for earthwork shall be outlined in appropriate Work plans specified in Section 01 35 13 – Special Project Procedures.
- B. Work performed during earthwork activities shall be summarized in the weekly progress report, as specified in Section 01 32 00 – Project Controls Requirements, and in the construction summary report, as specified in Section 01 35 13 – Special Project Procedures.
- C. Certification that imported materials are free of contaminants.
- D. Analytical data as specified in Section 01 35 13- Special Project Procedures.

- E. Soil testing data, including moisture density, gradation, and Proctor.
- F. Weigh tickets for imported materials.
- G. Compaction testing results with location and elevation of tests.
- H. Submittals shall be provided as required in Section 01 33 00 – Submittal Procedures.

1.5 QUALITY CONTROL

- A. The Contractor shall procure a qualified independent third-party geotechnical contractor to perform geotechnical and soil compaction testing as required and specified.
- B. The Contractor shall procure an Owner-approved qualified independent third-party laboratory service to perform analytical testing as specified, if required. The laboratory shall provide with the analytical results supplemental data, such as equipment calibration data, so that analytical results can be validated, if required.
- C. The Owner may procure an independent third-party geotechnical contractor to perform geotechnical and soil compaction testing concurrently with the Contractor's geotechnical contractor.

PART 2 – PRODUCTS

2.1 EQUIPMENT

- A. The Contractor shall provide, power, operate, control, and maintain all equipment necessary for the performance of the Work. Equipment shall be operated and maintained in accordance with manufacturer's recommendations and requirements.

2.2 HAUL TRUCKS

- A. The Contractor shall provide Owner-approved, US Department of Transportation (USDOT)-compliant transport vehicles in good condition, empty, and clean (decontaminated of formerly hauled materials).

2.3 MATERIALS

- A. Aggregate / Crushed Stone
 - 1. If needed for stabilization purposes, aggregate / stone must be procured from a source that certifies the materials are free of contamination.
 - 2. If clean certification is not available, the Contractor shall collect samples from each source for chemical analyses listed in Table 3 of this Section. Testing requirements include, but are not limited to, the following:
 - a. Each aggregate / stone source that does not have clean certification shall be tested.

- b. Samples will be collected and analyzed at a rate of one sample for every 2,500 cubic yards of aggregate / stone imported.
- c. Samples shall be submitted to an Owner-approved laboratory.
- 3. Tested materials are suitable provided they do not exceed the criteria outlined in Table 3 of this Section.
- 4. Aggregate / stone from an offsite recycled source may be approved by the Owner as follows:
 - a. If certification is provided indicating that the source of recycled concrete is from non-industrial sources.
 - b. The aggregate / stone is free of contamination.
- 5. Additional testing for physical properties and / or chemical analyses shall be required if subsequent delivered materials appear dissimilar (as determined by the Owner) to initial imported materials.
- 6. The Owner reserves the right to sample and reject any aggregate if found to be environmentally contaminated, based on, but not limited to, unusual discolorations, strong odors, free liquids, and / or analytical results from Owner sampling.

B. Imported Fill

- 1. Imported fill shall meet the following requirements:
 - a. As specified in Table 1 below
 - b. Free of debris, frozen materials, angular rocks, roots, and organics
 - c. Tested for physical properties at a rate of one sample per every 3,000 cubic yards of imported fill delivered (per source)

Table 1. Physical Property Testing and Limits of Imported Fill

Parameter	Units	Test Method	Accepted Value
Soil classifications		ASTM D 2487-17	Lean Clay (CL)
			Clayey Sand (SC), Silty Sand (SM), Well-Graded Gravel (GW)
			Clayey Gravel (GC), Well-Graded Gravel (GW)
Particle size	Inches	ASTM D 422-63(2007)e2	1.5 inch maximum
pH	Standard Unit	ASTM D 4972-13	5 to 7
Organic content	%	ASTM D 2974-14	Less than 5
Atterberg limits		ASTM D 4318-17	-
Moisture content	Millimeter	ASTM D 2216-10	-
Moisture density	Grams per cubic centimeter	ASTM D 698-12e2	-

Notes:

Moisture density shall have a minimum of five points to develop a compaction curve

2. Clean fill – The borrow source provider must provide certification that the material to be imported to the Owner’s property is from a virgin source and free of contamination. Farmed agricultural land is not considered a virgin source.
3. If clean certification is not available, the Contractor shall collect samples from each source for chemical analyses listed in Table 3 of this Section. Testing requirements include, but are not limited to, the following:
 - a. Each imported fill source that does not have clean certification shall be tested.
 - b. Samples will be collected and analyzed at a rate of one sample for every 1,000 tons of fill imported. Analytical results will be dated within 30 days or less from importation of material to the property.
 - c. Samples shall be submitted to an Owner-approved laboratory.
 - d. Tested materials are suitable provided they do not exceed the criteria outlined in Table 3 of this Section.
4. Imported fill material may be a combination of approved general fills. Multiple borrow sites may be used to provide the imported fill. Testing and sampling requirements apply to all borrow sites and materials.
5. Additional testing for physical properties and / or chemical analyses shall be required if subsequent delivered materials appear dissimilar (as determined by the Owner) to initial imported materials.
6. The Owner reserves the right to sample and reject any imported fill if found to be environmentally contaminated, based on, but not limited to, unusual discolorations, strong odors, free liquids, and / or analytical results from Owner sampling.

C. Topsoil

1. Topsoil shall consist of good quality friable soil consisting of a sandy loam, loam, or silty loam that is free of stones over 1.5 inches and meeting the following requirements, tested at a rate of one sample every 1,000 tons of topsoil delivered (per source):
 - a. For topsoil to be considered loamy, ensure that the fraction passing the No. 10 (2.00 millimeter) sieve does not contain more than 40 percent clay, particle size testing shall be performed per ASTM D 6913 and ASTM D 7928
 - b. Reasonably free from subsoil, clay lumps, stones, brush, objectionable stumps, roots, litter, toxic substances, and other material or substances which may be harmful to plant growth or be a hindrance to grading, and planting
 - c. Soil shall be representative of soil in the region which produce heavy growths of crops, grass, or other vegetation
 - d. The pH of the material is to be between 5 and 7, tested per ASTM D 4972-13

- e. The organic content shall be not less than 5 percent nor more than 20 percent, tested per ASTM D 2974-14
 - f. Topsoil containing soluble salts greater than 500 parts per million shall not be used
2. The source of the topsoil shall be provided with verification that it is not from a remediation site.
 3. The Contractor shall collect samples from each topsoil source for chemical analyses listed in Table 3 of this Section. Testing requirements include, but are not limited to, the following:
 - a. Samples will be collected and analyzed at a rate of one sample for every 1,000 tons of topsoil imported. Analytical results should be dated within one month of importation of material to the property.
 - b. Topsoil original sources(s) will be identified
 - c. Samples shall be submitted to an Owner-approved laboratory.
 - d. Tested materials are suitable provided they do not exceed the criteria outlined in Table 3 of this Section
 4. Additional testing for physical properties and / or chemical analyses shall be required if subsequent delivered materials appear dissimilar (as determined by the Owner) to initial imported materials.
 5. The Owner reserves the right to sample and reject any imported topsoil if found to be environmentally contaminated, based on, but not limited to, unusual discolorations, strong odors, free liquids, and / or analytical results from Owner sampling.

D. Material Chemical Testing

1. Borrow used for the fill and topsoil layers is to be free of contamination. All soil suitable for use as fill must be free of any physical evidence of contamination, including unusual discolorations, strong odors, free liquids, etc. Identify all topsoil and other fill sources prior to the beginning of the Work.
2. For soils from a virgin borrow source, the Contractor may provide a signed letter from the provider certifying that the borrow source material is not contaminated. If this is not the case or a certification letter cannot be obtained, the Contractor may demonstrate suitability of borrow soil by providing laboratory analysis for the following parameters identified in Table 3 below.
3. The Contractor shall collect samples of imported materials from all sources that do not have clean certification. Samples shall be analyzed for the following parameters at rates specified in this Section.

Table 3. Chemical Testing for Imported Materials

Parameter	Method	Acceptance Criteria
Volatile Organic Compounds (VOCs)	SW 846 Method 8260	35 IAC 1100.Subpart F http://www.epa.state.il.us/land/cccd/new-max-allowable-concentrations-table.pdf
Semi-volatile Organic Compounds (SVOCs)	SW 846 Method 8270	35 IAC 1100.Subpart F http://www.epa.state.il.us/land/cccd/new-max-allowable-concentrations-table.pdf
Poly Aromatic Hydrocarbons	SW 846 Method 8310	35 IAC 1100.Subpart F http://www.epa.state.il.us/land/cccd/new-max-allowable-concentrations-table.pdf
Polychlorinated Biphenyls (PCBs)	SW 846 Method 8082A	35 IAC 1100.Subpart F http://www.epa.state.il.us/land/cccd/new-max-allowable-concentrations-table.pdf
Herbicides	USEPA Method SW 8151A	
Total Metals (antimony, arsenic, barium, beryllium, boron, cadmium, chromium, cobalt, copper, fluoride, lead, lithium, manganese, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, zinc)	SW 846 Method 6020A	
pH		5 to 9 standard units

Notes:
 Additional analytes may be requested by the Owner based on the source of the material

PART 3 – EXECUTION

3.1 NOTIFICATIONS

- A. The Contractor shall notify the Owner prior to commencing new Work tasks.

- B. It is the responsibility of the Contractor to coordinate the presence of regulatory agency and / or local municipal representatives for Work where a representative must be present to perform an inspection. The Contractor shall notify the Owner when regulatory agency and local municipal representatives are scheduled to be present at the Jobsite.
- C. Upon discovery of contaminated material, based on visual, olfactory, or other evidence, Work in the area shall cease until the Contractor and Owner discuss appropriate response actions, including requirements for health and safety. The Owner will notify appropriate regulatory agencies of the discovery of contaminated material.
- D. The Contractor shall notify the Owner immediately when excavation Work may impact, in the opinion of the Contractor, the stability of features that are to remain in place, such as utility poles and paved roadways. The Contractor shall then consult with the Owner immediately for directions.

3.2 EXISTING CONDITIONS

- A. The Contractor shall evaluate existing conditions in areas of Work as specified in Section 02 00 00 – Existing Conditions to identify, evaluate, control, and mitigate hazards present or that may be encountered during the Work.
- B. Prior to commencing ground intrusive Work, the Contractor shall perform utility locating, as specified in Section 01 71 00 – Jobsite Preparation, throughout the planned area of Work.
- C. Groundwater may be encountered while performing the Work. The Contractor’s water management Work plan shall provide means and methods for managing and discharging water that infiltrates into excavations and the basement.
- D. Prior to commencing with Jobsite restoration activities, it is the responsibility of the Contractor to verify that demolition activities have been completed to the extent necessary to restore the Jobsite.

3.3 BARRIERS AND ENCLOSURES

- A. The Contractor shall barricade and mark open excavations in accordance with the Occupational Safety and Health Administration (OSHA), Illinois OSHA, and other applicable standards. Barricades shall be in place during working and nonworking hours until the excavation Work is completed.
- B. Barriers shall be placed as specified in Section 01 56 00 – Barriers and Enclosures.

3.4 DEGREE OF COMPACTION

- A. Degree of compaction is expressed as a percentage of the maximum density obtained by the test procedure presented in ASTM D 698, for general soil types, abbreviated as percent laboratory maximum density.

3.5 CONSTRUCTION TOLERANCES

- A. The Contractor shall uniformly grade subgrade and finished surfaces. Surfaces shall be free from depressions, mounds, or windrows.

3.6 CLEARING AND GRUBBING

- A. Clearing shall consist of the felling, trimming, and cutting of trees (only those absolutely necessary for the demolition Work) into sections and the removal of downed timber, snags, and brush occurring within the areas to be cleared. Stumps, matted roots, and roots over two inches shall be removed entirely. Woody debris shall either be disposed offsite or chipped for use as erosion control berms, temporary road wearing surface, or as a topsoil amendment as approved by the Owner.
- B. Vegetation, sod, and topsoil shall be stripped from existing surfaces in order to prepare the Jobsite for restoration and backfilling. The maximum depth of clearing and grubbing shall be six inches in areas that are currently vegetated. Vegetation and sod shall be disposed of by the Contractor. Topsoil may be temporarily stockpiled in a location approved by the Owner and used for final restoration topsoil so long as the topsoil is in compliance with the topsoil requirements of this Section.
- C. Burning of cleared materials is prohibited.

3.7 EXCAVATIONS AND MATERIAL HANDLING

- A. The Contractor shall saw cut pavements at locations where removal occurs in or adjacent to paved roadways and parking areas designated to remain. Removed pavements shall be collected by the Contractor and transported offsite for disposal or recycling, as appropriate.
- B. The Contractor shall setup, install, and maintain erosion and sediment controls with required inspections as specified in Section 01 57 13 – Temporary Erosion and Sediment Controls.
- C. The Contractor shall setup, install, and maintain dust and odor controls as specified in Section 01 56 16 – Dust and Odor Controls.
- D. The Contractor shall employ means necessary to avoid active utility (e.g., electric, gas, water, sewer, etc.) contacts, including, but not limited to, hand digging or air knife equipment to identify and expose active utilities in the vicinity of ground intrusive Work. Should uncharted, or incorrectly charted, active utilities be encountered during ground intrusive Work, the Contractor shall consult with the Owner immediately. The Contractor shall repair any damaged utilities to the satisfaction of the utility owner.
- E. The Contractor shall take necessary precautions during excavation Work to avoid damage to existing structures and above grade and below grade features and utilities, as specified in Section 02 00 00 – Existing Conditions. The Contractor shall be responsible for the repair caused by construction operations of any damage to structures and above grade and below grade features designated to remain to the Owner's satisfaction.

- F. The Contractor shall establish / construct temporary and permanent storm drainage features, as necessary, at the earliest stages of Jobsite development and throughout earthwork to provide positive surface water runoff away from the earthwork activity. Storm drainage features may include temporary and / or permanent ditches, swales, piping, structures and other drainage features and equipment as required.
- G. The Contractor shall utilize sloped sides, benching, shoring, bracing, or other appropriate measures as necessary to stabilize excavations to comply with codes, ordinances, and regulations applicable to the Work. Sides and base of excavations shall be managed in a safe condition until completion of backfilling.
- H. The Contractor shall have onsite one individual qualified as an excavation competent person as defined by 29 CFR 1926 to monitor excavation activities.
- I. Excavated soils deemed as suitable soils / materials, as defined herein, shall be temporarily stockpiled and used for filling. Suitable excavated soils can be used as backfill as long as placement and compaction requirements are achieved per this Section.
- J. Excavated soils deemed as unsuitable soils / materials, as defined herein, shall be temporarily stockpiled and used for general grading as directed by the Owner.
- K. Stockpiling of materials shall be performed in general accordance with Section 01 74 00 – Cleaning and Waste Management
- L. If Contractor discovers visual, olfactory, or other evidence of contamination, excavation activities shall cease, and the Owner shall be notified immediately.

3.8 DEWATERING

- A. Subgrade features and excavations shall be free of water prior to and during backfilling. The Contractor shall perform dewatering of excavations or the basement as specified in Section 31 23 19 – Dewatering.

3.9 BACKFILL AND COMPACTION

- A. Materials
 - 1. The Contractor shall import, place, compact, and grade fill as follows. Clean and suitable soils excavated during below grade demolition Work may also be utilized for the following:
 - a. For backfilling excavations and the basement to existing grade surface
 - b. For filling and grading above existing grade to restore disturbed areas in a manner that promotes drainage of storm water
 - 2. The Contractor shall import, place, and grade topsoil as follows:
 - a. For all disturbed areas designated to be seeded

B. Backfill

1. Certifications, geotechnical, and / or analytical testing of all imported materials shall be performed as specified and documentation / data provided to the Owner for review and approval 15 days prior to delivery of imported materials and use.
2. The Contractor shall perform testing of materials as specified from the borrow source. Test results shall be presented for each principal type or combination of fill materials proposed. Test results must comply with the requirements listed in this Section and shall be submitted to the Owner.
3. Materials delivered to the Jobsite without first obtaining Owner approval may require the Contractor to transport delivered materials offsite for return to the borrow source and / or disposal, as required. Transportation of returned materials will be at the Contractor's expense.
4. Backfilling shall not commence until the following has been completed:
 - a. The Owner has approved the completion of the Work necessary for excavation activities (e.g., removal of foundation, abandonment of piping, etc.)
5. The excavation surface shall be scarified, where possible, before backfilling commences. Sloped surfaces steeper than one foot vertical to four feet horizontal shall be plowed, stepped, benched, or broken up so that the fill material bonds with existing excavation material.
6. For backfilling excavations, fill materials shall be placed as follows:
 - a. When subgrade surfaces are not soft, frozen, or contain heavy frost or ice
 - b. In lifts having a loose thickness such that when compacted or graded, the lifts shall have a 12-inch nominal thickness or less as required to meet the compaction density requirement
 - c. Each lift compacted as specified up to existing grade
 - d. Do not place subsequent lifts until the preceding lift is compacted and compaction is verified and approved by testing
7. Lifts shall be moistened or aerated as necessary to provide optimum moisture content required for compaction as follows:
 - a. Where fill layers must be moisture-conditioned before compaction, the Contractor shall uniformly apply water to the surface of the fill layer at such a rate as to avoid free water from appearing on surface during or subsequent to compaction operations.
 - b. The Contractor shall scarify and air dry or remove and replace fill that is too wet to permit compaction to specified density. Soil material that has been removed because it is too wet may be stockpiled until moisture content is reduced to a satisfactory value, as determined by moisture-density relation tests.
8. If, in the opinion of the Owner, based on testing or inspection, subgrade conditions are unsuitable or lifts of fill are greater than specified, the Contractor shall perform additional Work to meet the Technical Specifications at no additional cost to the Owner.
9. The Contractor shall procure, transport, place, and grade additional imported fill at elevations greater than existing grade as necessary to achieve the following:
 - a. To prevent subsidence in backfilled areas

- b. To ensure storm water drains away from backfilled areas, towards existing storm water drainage features

C. Compaction

1. Each lift of imported fill shall be compacted to meet a minimum specified maximum dry density of 90 percent Modified Proctor per ASTM D 1557 and conditioned to within plus or minus four percent optimum moisture content.
2. A minimum of one test shall be performed each day for standard moisture content per ASTM D 2216-10 and nuclear moisture content per ASTM D 6938-17a.
3. It is the responsibility of the Contractor to utilize all necessary equipment to meet specified compaction requirements.
4. Compaction testing shall be performed for backfilling of excavations and the basement with a depth of two feet or more as follows:
 - a. One test per lift for every 50 linear feet of trench excavations
 - b. Six tests per lift for the basement
 - c. One test per lift for pits
 - d. Up to existing grade only
 - e. Or as requested by the Owner, based on the size of excavation or fill area
5. Compaction testing shall be performed by nuclear density readings in direct transmission mode as specified in ASTM D 6938-17a. Standard density testing shall be performed per ASTM D 1556 / D 1556M-15e1 or ASTM D 2167-15 at a rate of once per day or once for every 20 nuclear density tests. Perform standard tests at locations which are as close as possible to the locations of the nuclear tests being checked.
6. Moisture content of the soil can be checked via ASTM D 6938-17a. Check the calibration curves furnished with the moisture gauges also along with density calibration checks as described in ASTM D 6938-17a at the beginning of Work on each different type of material encountered and at intervals as directed by the Owner.
7. Locations of compaction tests shall be spaced relatively evenly and in different locations for each subsequent lift. Compaction testing locations shall be noted in the compaction testing report, referenced to and measured from a known / identifiable starting point, such as:
 - a. Basement fill: 25 feet west, 25 feet north of southeast corner of the foundation.
 - b. Establish a grid pattern for general areas to receive fill. Develop a tracking system to ensure that compaction testing requirements are being achieved.
8. Field moisture content and density test results shall be compared to the compaction curve for the appropriate material type being tested. If test results are not within the acceptable range for moisture content or density, the Contractor shall perform three additional tests near the location of the failed test. If all retests pass, take no additional action. If any of the retests fail, repair the lift of fill out to the limits defined by passing tests for that parameter (e.g., moisture content or density).

9. Field testing results shall be provided to the Owner as they are performed. If, in the opinion of the Owner, based on testing or inspection, compaction is less than the specified density, the Contractor shall perform additional Work to meet the Technical Specifications, at no additional cost to the Owner, prior to adding subsequent lifts of fill. If the Contractor chooses to rework an area which has been rejected for nonconformance with the density criteria, and after reworking it fails testing up to two more attempts, the Contractor shall excavate the rejected area and reconstruct with new material.

3.10 GRADING

- A. Grading shall be performed for all areas disturbed during the performance of the Work.
- B. The Contractor shall place and grade imported fill at elevations above existing grade to restore disturbed areas in a manner that promotes drainage of storm water.
- C. Grading shall be completed to a smooth finish surface necessary for seeding by blading, rolling with a smooth roller, or both.
- D. Any delay or phasing of Work may necessitate that the Contractor will be required to perform the following Work prior to placement of topsoil and seeding:
 1. Placement of additional fill material to remove erosion rills

3.11 TOPSOIL

- A. The Contractor shall place topsoil on subgrade elevations to obtain a reasonably uniform depth of six inches.
- B. Topsoil shall not be placed when the subgrade is frozen, excessively wet, extremely dry, or in a condition otherwise detrimental to proper grading and germination of seed.
- C. Topsoil shall be spread and tilled to rake out pieces of sod, roots, and grass and prepared for fertilizing and seeding.

3.12 SEEDING

- A. Seed shall be placed in all areas as indicated in the restoration Drawings. Seeding shall be performed as specified in Section 32 92 19 – Seeding.

3.13 PROTECTION

- A. The Contractor shall protect newly graded areas from traffic and erosion.
- B. Storage or stockpiling of material on completed surfaces is not permitted.

- C. The Contractor shall repair erosion rills or other damage that occurs and reestablish grades. The Contractor shall document repairs to the fill or topsoil layer including location and volume of materials affected, corrective action taken, and results of retests.

3.14 INSPECTIONS

- A. Requirements for inspections are outlined in Section 01 41 00 – Regulatory Requirements.

END OF SECTION

SECTION 31 23 19 – DEWATERING

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. The Contractor shall provide all labor, power, equipment, controls, materials, and personal protective equipment (PPE) necessary for the control, collection, filtering, and disposition of water as required to complete the Work, including, but not limited to, the following:
1. Water that may accumulate in the basement or pits
 2. Water that may accumulate in excavations
- B. Work by the Contractor associated with managing water that enters the basement shall consist of the following:
1. Installing and maintaining necessary controls to prevent storm water and / or groundwater from entering the basement when wash water, asbestos fibers, dust, and other demolition debris is present.
 2. Storm water and / or groundwater that enters the basement before it is cleaned shall either be collected for offsite disposal or can be treated for discharge to the Greater Peoria Sanitary District sanitary sewer system in accordance with the district's requirements. Due to the conditions present in the building, all water that collects in the basement shall be assumed to contain asbestos fibers or other contaminants.
 3. Furnishing, powering, operating, and maintaining dewatering equipment as necessary to maintain excavations and the basement reasonably dry of water.
 4. Providing and maintaining treatment controls including, but not limited to, sediment removal traps, filters, sediment filter bags, or other controls as necessary or directed by the Owner.
 5. Performing sampling and laboratory analyses of water for offsite disposal requirements or prior to discharge to the Greater Peoria Sanitary District to confirm compliance with the Owner and district's requirements.
- C. Discharge of contaminated liquids from the basement or excavations to the ground surface, or storm drains at the Jobsite is prohibited by environmental regulations. As such, the Contractor shall perform the Work in an expedited manner that limits the amount of water requiring disposal or treatment and discharge.
- D. Water in excavations or the basement that is determined to be impacted from the Contractor's operations shall be contained, characterized, and transported for offsite disposal at the Contractor's expense.

- E. Water discharged to the Greater Peoria Sanitary District sanitary system shall be containerized, characterized, sampled, and discharged in accordance with the Greater Peoria Sanitary District's requirements. The Contractor shall be responsible for providing containers or temporary tanks as necessary based on the volume of water to be managed. The Contractor shall be responsible for all sampling, laboratory analyses, and water treatment system requirements to discharge treated water to the sanitary sewer system. Analytical data from sampling shall be submitted to both the Owner and the Greater Peoria Sanitary District for review prior to discharge. Samples shall be collected from each container to be discharged.
- F. The Contractor shall perform all Jobsite Work in a manner that does not allow sediment, debris, oils, or other materials to enter the Jobsite storm water systems.
- G. Dewatering Work shall be performed in accordance with best management practices, the Illinois Environmental Protection Agency (EPA) construction notice of intent permit, the Contractor's storm water management plan, these Technical Specifications, and all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
 - 1. Section 01 32 00 – Project Controls Requirements
 - 2. Section 01 33 00 – Submittal Procedures
 - 3. Section 01 35 13 – Special Project Procedures
 - 4. Section 01 41 00 – Regulatory Requirements
 - 5. Section 01 74 00 – Cleaning and Waste Management
 - 6. Section 02 00 00 – Existing Conditions
 - 7. Section 02 41 00 – Demolition
 - 8. Section 31 20 00 – Earthwork
- B. Work outlined in this Section shall be performed in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. References to regulatory requirements are included in Section 01 41 00 – Regulatory Requirements. The Contractor shall comply with all authorities having jurisdiction over the Work.

1.3 SUBMITTALS

- A. Work to be performed for dewatering shall be outlined in appropriate Work plans specified in Section 01 35 13 – Special Project Procedures.
- B. Work performed during dewatering activities shall be summarized in the weekly progress report, as specified in Section 01 32 00 – Project Controls Requirements, and in the construction summary report, as specified in Section 01 35 13 – Special Project Procedures.

- C. Completed inspection forms, as specified in Section 01 41 00 – Regulatory Requirements and Section 01 74 00 – Cleaning and Waste Management.
- D. Analytical data, as specified in Section 01 35 13 – Special Project Procedures.
- E. Submittals associated with analytical for waste characterization and profiling and waste transportation and disposal documentation (e.g., waste manifests) is specified in Section 01 74 00 – Cleaning and Waste Management.
- F. Submittals shall be submitted as specified in Section 01 33 00 – Submittal Procedures.

1.4 PERMITS, LICENSES, AND CERTIFICATIONS

- A. It is the responsibility of the Contractor to meet all requirements stipulated in the wastewater and storm water discharge permits and to Work and coordinate with the Owner. If conditions of permits cannot be met, the Contractor is required to immediately contact the Owner and outline cause. The Owner will determine if a modified permit is possible.
- B. The Contractor shall provide an individual qualified to monitor discharges. Inspector qualifications shall include completion of a construction storm water management course.

1.5 QUALITY CONTROL

- A. The Contractor shall procure an Owner-approved qualified independent third-party laboratory service to perform analytical testing of water as specified. The laboratory shall provide with the analytical results supplemental data, such as equipment calibration data, so that analytical results may be validated, if required.

PART 2 – PRODUCTS

2.1 EQUIPMENT

- A. The Contractor shall supply all equipment necessary to perform dewatering as necessary for the performance of the Work. Equipment includes, but is not limited to, pumps, controls, floats, hoses, piping, connections, filtration devices such as bag filters, frac tanks, treatment systems, and cold weather protections.
- B. Equipment for dewatering may be new or used but shall be suitable for the Work and be maintained in good condition.

2.2 VACUUM TRUCKS

- A. The Contractor shall provide vacuum trucks in good condition, empty, and clean (decontaminated of formerly stored materials).

2.3 MATERIALS

- A. The Contractor shall provide all necessary materials to perform the Work. Materials shall be delivered to the Jobsite; handled, stored, and protected; and utilized as specified by manufacturer's recommendations and requirements.
- B. The Contractor shall provide sediment removal traps, filters, sediment filter bags, or other controls as necessary to remove sediments from dewatering water.

2.4 CONTAINERS AND PACKAGING

- A. The Contractor shall provide US Department of Transportation (USDOT)-compliant containers in good condition, empty, and clean (decontaminated of formerly stored materials). Containers include drums, as required for small quantity containerization, and polyethylene tanks or larger steel tanks, such as those supplied by Rain-for-Rent, for larger quantities of water. Containers shall be made of materials compatible with the type of waste(s) being stored.

2.5 SAFETY AND SIGNAGE

- A. The Contractor shall provide all materials, equipment, PPE, facilities, and personnel required to perform the Work in accordance with Federal, State, and local health and safety rules and regulations.
- B. The Contractor shall provide, install, and maintain safety signage in areas of Work as required by the Occupational Safety and Health Administration (OSHA) and Illinois OSHA. The Contractor shall provide and install signage for storage areas, containers, and transportation vehicles as required by Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work.

2.6 SPILL RESPONSE

- A. The Contractor shall provide appropriate spill response materials including, but not limited to the following: containers, absorbents, shovels, and PPE. Spill response materials shall be available at all times when contaminated materials / wastes are being handled or transported. Spill response materials shall be compatible with the type of materials and contaminants being handled.

PART 3 – EXECUTION

3.1 NOTIFICATIONS

- A. The Contractor shall notify the Owner when:
 - 1. The Contractor is prepared to begin dewatering of below grade features.
 - 2. The Contractor encounters water during excavations that requires dewatering for the removal of or backfilling of materials.
 - 3. The Contractor is prepared to collect samples for chemical analysis.

4. The Contractor is prepared to discharge water that has been characterized.
- B. The Contractor will receive written authorization from the Owner prior to each discharge event.
- C. If a discharge permit is obtained from the Greater Peoria Sanitary District, the Contractor shall attend a meeting at the Jobsite to discuss with the Owner procedures and controls in place to ensure compliance with the permit prior to the startup of dewatering operations. The Contractor shall attend additional meetings at the Jobsite as requested by regulatory agencies and the Owner.

3.2 EXISTING CONDITIONS

- A. The Contractor shall evaluate existing conditions in areas of Work as specified in Section 02 00 00 – Existing Conditions to identify, evaluate, control, and mitigate hazards present or that may be encountered during the Work.

3.3 GENERAL REQUIREMENTS

- A. The Contractor shall furnish all labor, materials, and equipment, and perform all operations required to design, furnish, install, test, pump, measure, and maintain dewatering equipment and water storage / diversion systems, including tank(s), sumps, electric power supply and distribution as required so that the Work can be conducted under controlled conditions.
- B. Dewatering Work shall be performed in accordance with best management practices, the Illinois EPA notice of intent construction permit, the Contractor's storm water management plan, the Greater Peoria Sanitary District wastewater discharge permit (if obtained), these Technical Specifications, and all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. Requirements include, but are not limited to, filtration of water to remove sediment and / or asbestos fibers, sampling of discharges, and inspections and reporting. Coordination and alignment with the Owner regarding assured permit compliance is mandatory. The Contractor's qualified storm water inspector shall monitor discharges.
- C. It is the responsibility of the Contractor to perform dewatering Work as necessary, whether during normal working days, after normal working hours, or on weekend days, to keep the basement from flooding and / or keep excavations relatively dry as necessary to prevent an illicit discharge.
- D. The Contractor shall grade the Work area(s) using run-on / runoff controls including but not limited to slopes, berms and sumps in conjunction with dewatering systems to channel water away from the immediate Work areas to minimize dewatering and prevent undue impediments to soil inspection and excavation progress. Any grading measures shall prevent storm water from leaving the Jobsite.
- E. The Contractor shall furnish, install, and operate pumping equipment of sufficient capacities to meet the requirements for the removal of water from Work areas.

- F. The Contractor shall keep on hand, or have immediate access to, additional pumps of sufficient capacity to maintain dewatering activities during any pump breakdown, maintenance, or in case of flooding. The Contractor shall keep on hand, or have immediate access to, spare components (e.g., hose, piping, etc.) to provide reasonably for any breakdown or damage.
- G. Treatment controls including, but not limited to, sediment removal traps, filters, sediment filter bags, or other controls as necessary by permit or directed by the Owner shall be installed and maintained.
- H. Where tanks are utilized, the Contractor shall implement appropriate methods to limit transport of suspended solids into the tank(s), including but not limited to gravel, weirs, geotextile, slotted pipe or well materials, and additional bag or sand filters.
- I. The Contractor shall utilize sound enclosures for any generators used to power dewatering equipment.
- J. The Contractor shall provide sufficient suction and discharge hose or piping for transferring pumped liquids without causing erosion, sedimentation, or other adverse consequences.
- K. The Contractor shall provide freeze protection for all dewatering hoses, piping, and pumping equipment necessary to execute the work throughout the winter months, including but not limited to insulation, heat wraps, heaters, and / or enclosures. Freeze protection chemicals or solutions shall not be used onsite without prior approval by the Owner.
- L. The Contractor shall provide, install, and maintain necessary controls and perform all Jobsite Work in a manner that does not allow debris, oils, chemicals, asbestos fibers, dust or other materials from entering the basement, excavations, and other areas where dewatering Work must be performed. During active pumping, the Contractor shall inspect water for visual and olfactory indications of suspect contamination, such as evidence of sheen, odor, or debris. If noted, the Contractor shall shut down the pump and notify the Owner. Suspect contaminated water shall be containerized and handled as specified in Section 01 74 00 – Cleaning and Waste Management.
- M. Removal and Handling
 - 1. Overland Flow
 - a. For excavations, if no visual, olfactory, or other evidence of contamination exists, such as evidence of sheen or odor, dewatering water may be discharged overland to a well vegetated area specified by the Owner. Discharge of water overland shall be first approved by the Owner.
 - b. Water shall be conveyed via hosing / piping installed by the Contractor and discharged overland in grassy areas away from storm drains or storm ditches.
 - c. During pumping of excavation water, the Contractor shall continue to inspect water for visual, olfactory, or other evidence of contamination. If

noted, the Contractor shall shut down the pump immediately and notify the Owner. Suspect contaminated water shall be collected and containerized as specified in Section 01 74 00 – Cleaning and Waste Management.

- d. The Owner may request a sample(s) to be collected for characterization purposes. Sampling shall be performed as specified herein.
- e. The Contractor's qualified storm water inspector shall monitor overland discharges.

2. Containerization

- a. If visual, olfactory, or other evidence of contamination exists, such as evidence of sheen or odor, the Contractor shall remove water that accumulates in the basement and / or excavations via vacuum truck or dedicated pump and hosing for containerization in polyethylene drums, containers, or temporary tanks based on the quantity of water to be collected. Costs associated with managing water that has been contaminated by the Contractor's operations shall be covered by the Contractor.
- b. Contaminated water from different sources (e.g., basement, excavation, etc.) shall be containerized separately.
- c. The Contractor shall collect representative samples from collected water for characterization purposes. Sampling shall be performed as specified herein.
- d. Containerized water shall be managed at the Jobsite until characterization data is received and arrangements are made for either onsite treatment and discharge or offsite transportation and disposal, as appropriate.
- e. Drums, containers, and temporary tanks shall be labeled and staged at locations as approved by the Owner. When drums, containers, or tanks are not staged near the dewatering activities, the Contractor shall transport drums and containers to the designated staging area.
- f. Containerized water shall be disposed offsite or discharged to the sanitary sewer (if approved and permit obtained), as specified herein.

N. The Contractor will be responsible for all costs associated with containerization, characterization, and transportation and offsite disposal for waters impacted from the Contractor's operations.

O. All dewatering equipment shall remain the property of the Contractor and shall be decontaminated and removed from the Jobsite at the completion of the Work. Decontamination shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.

3.4 DEWATERING OF BASEMENT AND PITS

A. Dewatering of the basement and pits shall be performed by the Contractor as necessary until the basement and pits are demolished. The basement shall first be cleaned / decontaminated by the Contractor as specified in Section 01 74 00 – Cleaning and Waste Management.

- B. The Contractor shall furnish, install, power, operate, control, and maintain pumps as necessary, to keep the basement and pits reasonably dry of water until it is demolished.

3.5 DEWATERING OF EXCAVATIONS

- A. Excavations shall be performed expeditiously in order to limit the amount of water to be handled.
- B. Water from excavations shall be filtered to remove sediment prior to discharge or containerization. Filtering includes use of sediment removal traps, filters, sediment filter bags, or other controls as necessary to remove sediments from collected water.
- C. Requirements for performing excavation Work are specified in Section 31 20 00 – Earthwork.

3.6 WASTE CHARACTERIZATION

- A. Waste characterization shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management. Containerized water shall be managed at the Jobsite until waste characterization data is received and disposition of the water is determined.

3.7 LABELING

- A. Containers shall be labeled as specified in Section 01 74 00 – Cleaning and Waste Management.

3.8 TRANSPORTATION AND DISPOSAL

- A. Transportation and disposal shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.

3.9 DECONTAMINATION

- A. Equipment, hoses / piping, tools, containers, tanks, vacuum trucks and other materials shall be decontaminated prior to reuse at a different location onsite or offsite. Decontamination consists of proper cleaning to prevent the spread of possible contamination from area to area onsite, or offsite. Decontamination shall be performed as specified in Section 01 74 00 – Cleaning and Waste Management.

3.10 INSPECTIONS

- A. The Contractor shall inspect the basement and excavations daily for visual evidence of contamination, such as oil sheen or dust and debris.
- B. Inspections shall be performed as required by permit and documentation of inspections shall be provided to the Owner.

- C. Drums, containers, and tanks containing water shall be inspected on a weekly basis by the Contractor during the performance of the Work until the water is transported offsite for disposal or discharged to the sanitary sewer, as appropriate and approved by the Owner. Inspection documentation completed by the Contractor shall be submitted to the Owner.
- D. Inspections shall be performed as outlined in Section 01 41 00 – Regulatory Requirements and Section 01 74 00 – Cleaning and Waste Management.

END OF SECTION

SECTION 32 92 19 – SEEDING

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. The Contractor shall provide all labor, equipment, materials, and personal protective equipment (PPE) necessary to seed areas where earthwork activities were performed. Work includes, but is not limited to, the following:
1. Furnishing and placing seed as temporary cover as required
 2. Furnishing and placing seed and mulch for permanent cover
- B. Permanent seeding shall be planted on all fill and graded areas. Permanent seeding shall be placed in areas that are currently vegetated and get disturbed by the Contractor's Work.
- C. Seeded areas shall be protected with barriers as appropriate.
- D. Seeding shall be performed and maintained in accordance and consistent with the following:
1. City of Peoria erosion and storm water permit
 2. Illinois Department of Transportation (DOT) *Erosion and Sediment Control Field Guide for Construction Inspection*
 3. Illinois DOT 2022 Standard Specifications for Road and Bridge Construction
 4. *Illinois Urban Manual*

1.2 REFERENCES

- A. All requirements specified elsewhere in this Technical Specification, or elsewhere in the Contract Documents, as being applicable to all Work shall apply to the Work in this Section including, but not necessarily limited to, the following:
1. Section 01 32 00 – Project Controls Requirements
 2. Section 01 33 00 – Submittal Procedures
 3. Section 01 35 13 – Special Project Procedures
 4. Section 01 41 00 – Regulatory Requirements
 5. Section 01 56 00 – Barriers and Enclosures
 6. Section 01 57 13 – Temporary Erosion and Sediment Controls
 7. Section 02 00 00 – Existing Conditions
 8. Section 31 20 00 – Earthwork
- B. The publications listed below form a part of this Section to the extent referenced. The most recent issue of each publication shall apply, unless otherwise noted. The publications are referred to in the text by the basic designation only.
1. Illinois DOT *Erosion and Sediment Control Field Guide for Construction Inspection*
 2. *Illinois Urban Manual*

- C. Work outlined in this Section shall be performed in accordance with all applicable Federal, State, local laws, ordinances, codes, rules and regulations applicable to the Work. References to regulatory requirements are included in Section 01 41 00 – Regulatory Requirements. The Contractor shall comply with all authorities having jurisdiction over the Work.

1.3 SUBMITTALS

- A. Work to be performed for seeding shall be outlined in the appropriate Work plans specified in Section 01 35 13 – Special Project Procedures.
- B. Work performed during seeding activities shall be summarized in the construction summary report, as specified in Section 01 35 13 – Special Project Procedures.
- C. Product information for mulch(if used), and seed mixture.
- D. Submittals shall be submitted as specified in Section 01 33 00 – Submittal Procedures.

1.4 QUALITY CONTROL

- A. The Contractor shall provide fresh, clean, new crop, certified seed complying with tolerance for purity and free of poa annua, bent grass, and noxious weed seed. All materials and suppliers are to follow Illinois Seed Law and Illinois Department of Agriculture regulations and be labeled an Illinois Crop Improvement Association-approved seed conditioner or grower.
- B. Grass seed mixture shall be certified weed free by the Illinois Crop Improvement Association.
- C. Seed shall be supplied in durable bags, with a tag marked by the manufacturer and supplier of the blended mix showing the species and variety name, lot number, net weight of contents, purity, and germination.

PART 2 – PRODUCTS

2.1 EQUIPMENT

- A. The Contractor shall provide, power, operate, control, and maintain all equipment necessary for the performance of the Work. Equipment shall be operated and maintained in accordance with manufacturer's recommendations and requirements.

2.2 MATERIALS

- A. Seed
 - 1. Temporary and permanent seed shall conform to the following specifications:

Table 1. Temporary Seed Requirements

Species	Purity Minimum %	% By Weight	Pounds / Acre
Perennial Ryegrass	96	44	50
Spring Oats	85	56	64

Table 2. Permanent Seed Requirements

Species	Purity Minimum %	% By Weight	Pounds / Acre
Kentucky Blue Grass	98	50	100
Perennial Ryegrass	96	30	60
Creeping Red Fescue	97	20	40

2. Grass seed mixture shall include no "primary noxious weed seeds."
3. Labels shall clearly state the percentage of each seed type in the mixture, purity, and weed seed content of the mixture.
4. Seed that has become wet, moldy, or otherwise damaged shall not be accepted.
5. Other suitable seed mix is acceptable, if approved by the Owner and is recommended by Illinois Standard Specifications for Road and Bridge Construction 2022 edition.

B. Mulch

1. Mulch is vegetative (straw) or fiber mulch fresh, clean, dry, and free from mold, Johnsongrass or other noxious weeds.

C. Tackifier

1. The Contractor shall propose a tackifier to the Owner for approval prior to use if a tackifier is needed for the Work.

PART 3 – EXECUTION

3.1 NOTIFICATIONS

- A. The Contractor shall notify the Owner prior to commencing new Work tasks.

3.2 EXISTING CONDITIONS

- A. The Contractor shall evaluate existing conditions in areas of Work as specified in Section 02 00 00 – Existing Conditions to identify, evaluate, control, and mitigate hazards present or that may be encountered during the Work.

- B. The Contractor shall examine areas to receive vegetation for compliance with requirements and for conditions affecting performance of the Work of this Technical Specification. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.3 DELIVERY, STORAGE AND HANDLING

- A. Seed, and mulch shall be delivered in original sealed, labeled, and undamaged containers. Containers shall be stored in covered area.

3.4 COORDINATION AND SCHEDULING

- A. Seed shall be planted during normal planting seasons for type of vegetation required.
- B. Planting shall proceed only when existing and forecast weather conditions are suitable for the Work.

3.5 PREPARATION

- A. The Contractor shall maintain erosion control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties. Erosion and sediment controls are specified in Section 01 57 13 – Temporary Erosion and Sediment Controls.
- B. The Contractor shall protect adjacent and adjoining areas from hydroseeding over-spraying.
- C. Seeded Areas
 - 1. Previous growth and debris shall be removed from areas to be seeded before commencing the Work. Where temporary seed has been planted for temporary erosion control and has not been eliminated at the time permanent seeding is to be performed, the Contractor shall till soils at least four inches deep.
 - 2. Erosion rills and other depressions shall be repaired.
 - 3. Areas shall be worked with a disk, harrow, dragged with a chain, mat or blade, machine-raked, or hand-worked as necessary to provide a reasonably firm but friable seedbed.
- D. Depth of Tillage
 - 1. Tillage shall be four inches or as directed by the Owner.
 - 2. Tillage depth shall be reduced on slopes steeper than 2.5:1 (H:V).
- E. Additional topsoil shall be applied as necessary for seeding. Placement of topsoil is specified in Section 31 20 00 – Earthwork.

3.6 APPLICATION

- A. Seeding
 - 1. Temporary
 - a. Temporary seed shall be added to disturbed areas as required for erosion control. Erosion control requirements are specified in Section 01 57 13 – Temporary Erosion and Sediment Controls.
 - b. The application rate for temporary seed is listed in Tale 1 of this Section.
 - 2. Permanent
 - a. Permanent seed shall be added when:
 - i. Immediate protection of newly graded areas is necessary, but application is occurring at a time which is outside of the normal seeding season. The Contractor shall apply hay mulch with the seeding.
 - ii. Immediate seeding is required for disturbed areas which are not to be re-graded or disturbed.
 - iii. The application rate for permanent seed is listed in Table 2 of this Section.
- B. Mulch
 - 1. Mulch shall be applied immediately after an area has been properly prepared. Mulch shall not be applied or disposed in ditches.
 - 2. Apply mulch to an approximate two-inch loose depth at the rate of two tons per acre, ensuring adequate coverage of seeded areas.
 - 3. Straw or hay mulch should cover the ground enough to shade it, but the mulch should not be so thick that a person standing cannot see ground through the mulch.
 - 4. When required due to potential for wind or water erosion, slopes, or near roadways, mulch shall be secured by netting or other sufficient means of anchoring.
 - 5. Properly dispose of all baling wire or rope.
- C. Seeding Seasons
 - 1. Conduct permanent seeding between April 15 and June 30, or between August 15 and September 30, or as approved by Owner.
 - 2. Special care must be taken during the hot dry periods from June to mid to late August. Do not seed during windy weather or when the ground is frozen, excessively wet, or otherwise untillable.

3.7 SEEDING METHODS

- A. The Contractor shall place seed of the type specified and mulch material, if required, at the locations shown or ordered by one of the following methods, provided an even distribution is obtained. The maximum seeding depth is 1/4-inch when using methods other than hydroseeding.

1. Dry Method
 - a. Use power equipment for accessible areas. Power equipment includes mechanical seeders, seed drills, landscape seeders, cultipacker seeders, or other Owner approved mechanical seeding equipment or attachments when seed is to be applied in dry form.
 - b. Use manual equipment for areas which are inaccessible to power equipment. The use of hand shovels to spread the materials is not allowed.
 - c. Unless otherwise directed, mulch areas after seeding.
2. Hydraulic Method
 - a. The application of seed and suitable mulch may be accomplished in one operation by using a spraying machine.
 - b. Mix materials with water in the machine and keep in an agitated state in order that the materials may be uniformly suspended in the water.
 - c. If the results of the spray operations are unsatisfactory, abandon this method and apply the materials by the dry method.
 - d. If inoculum is required, mix with the seed and spray.
 - e. Compaction or rolling is not required.
 - f. Apply mulch within one-half hour of seeding. If mulching cannot be performed in this time period, the Contractor take measures to protect the seed from sunlight and heat such as the use of a light brush dragged over the seeded areas to stir the seed into the soil, taking care not to carry the seed ahead.

3.8 CARE AFTER SEEDING

- A. Care after seeding, such as watering or mowing, is not required. However, the Owner expects the Jobsite to be restored as a grassy greenspace area. It is the Contractor's option to provide care after seeding; however, the Contractor will be required to perform the following as part of the Work, as requested by the Owner, through the first growing season:
 1. Repair of erosion rills
 2. Repair of thin (less than 90 percent growth) or bare vegetation spots or areas
- B. Repair of thin or bare vegetation spots or areas may require additional tillage, topsoil, seeding, and application of mulch.

3.9 INSPECTIONS

- A. Disturbed earth, seeding, and mulch areas shall be inspected at least once per week by a qualified inspector. Inspections are to be recorded on a log and reported to the Owner. If corrective actions are warranted during inspection, the Contractor is responsible to perform the necessary corrections to ensure compliance. Inspections shall be required until the disturbed area is permanently stabilized as approved by the Owner and the local soil erosion and sedimentation control agency.

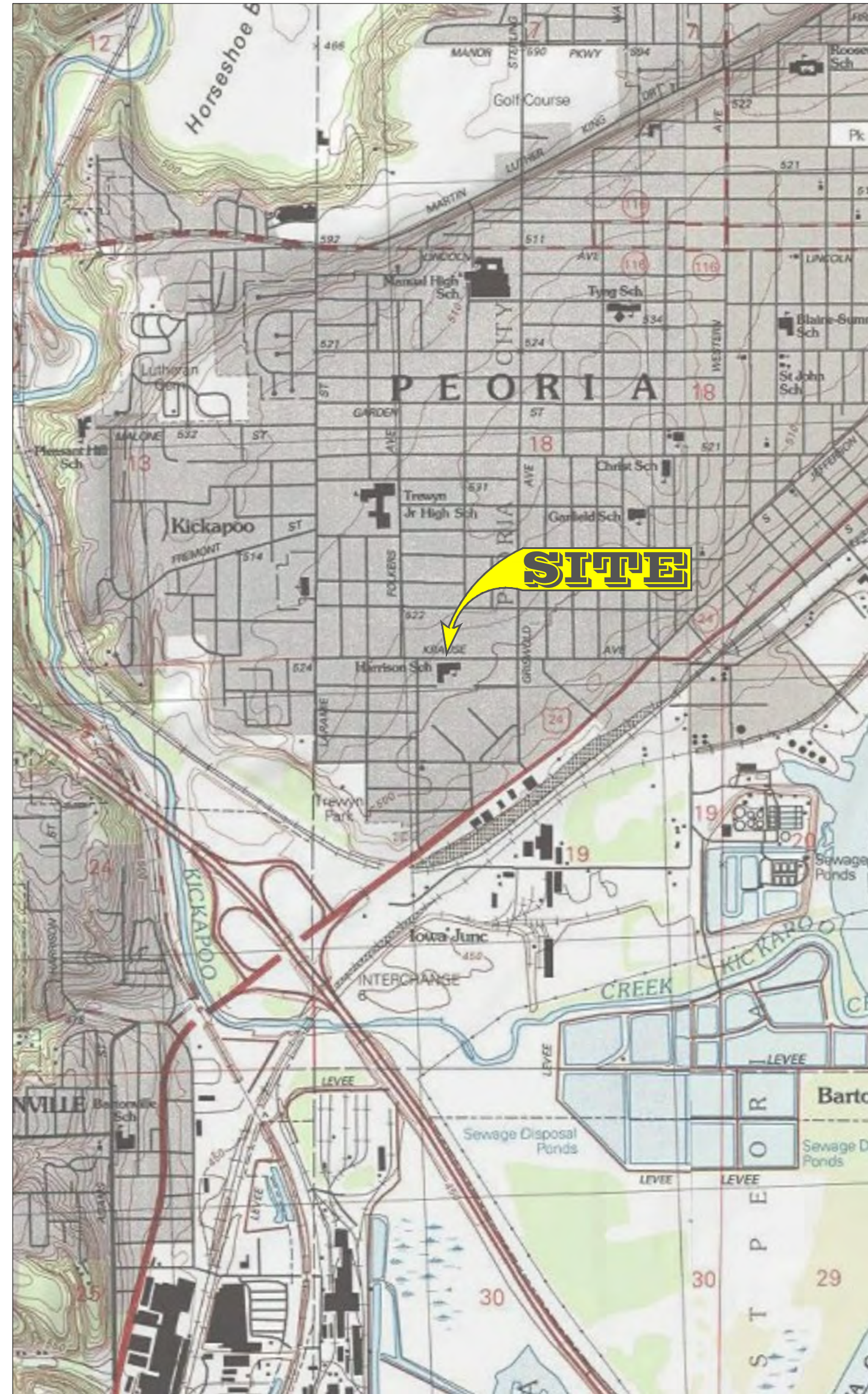
- B. Additional requirements for inspections are outlined in Section 01 41 00 – Regulatory Requirements.

END OF SECTION

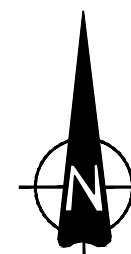
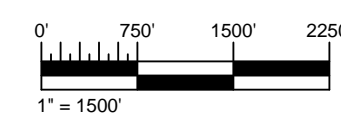
DRAWINGS

HARRISON SCHOOL ABATEMENT, DEMOLITION, AND RESTORATION

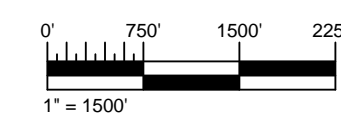
2702 WEST KRAUSE AVENUE
PEORIA, ILLINOIS



U.S.G.S. TOPOGRAPHIC MAP



VICINITY AERIAL PHOTOGRAPH



INDEX OF SHEETS

NO.	NAME	TITLE
GENERAL		
01	G-1	TITLE AND DRAWING INDEX SHEET
DEMOLITION		
02	D-1	SITE PLAN
03	D-2	GENERAL BUILDINGS AND ABOVE GROUND STRUCTURES DEMOLITION PLAN
04	D-3	GRADE & BELOW GROUND STRUCTURES DEMOLITION PLAN
05	D-4	RESTORATION PLAN

NOTE: THESE DRAWINGS ARE THE PROPERTY OF WSP USA AND ARE NOT TO BE REPRODUCED IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF WSP USA AND ITS CLIENT.

REV	DATE	MONTH	YEAR	REVISION DESCRIPTION	ENG.	APPR.
△	07	10	2022	DEMOLITION PLAN	KK	X



CITY OF PEORIA

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Novi, MI, U.S.A. 48377

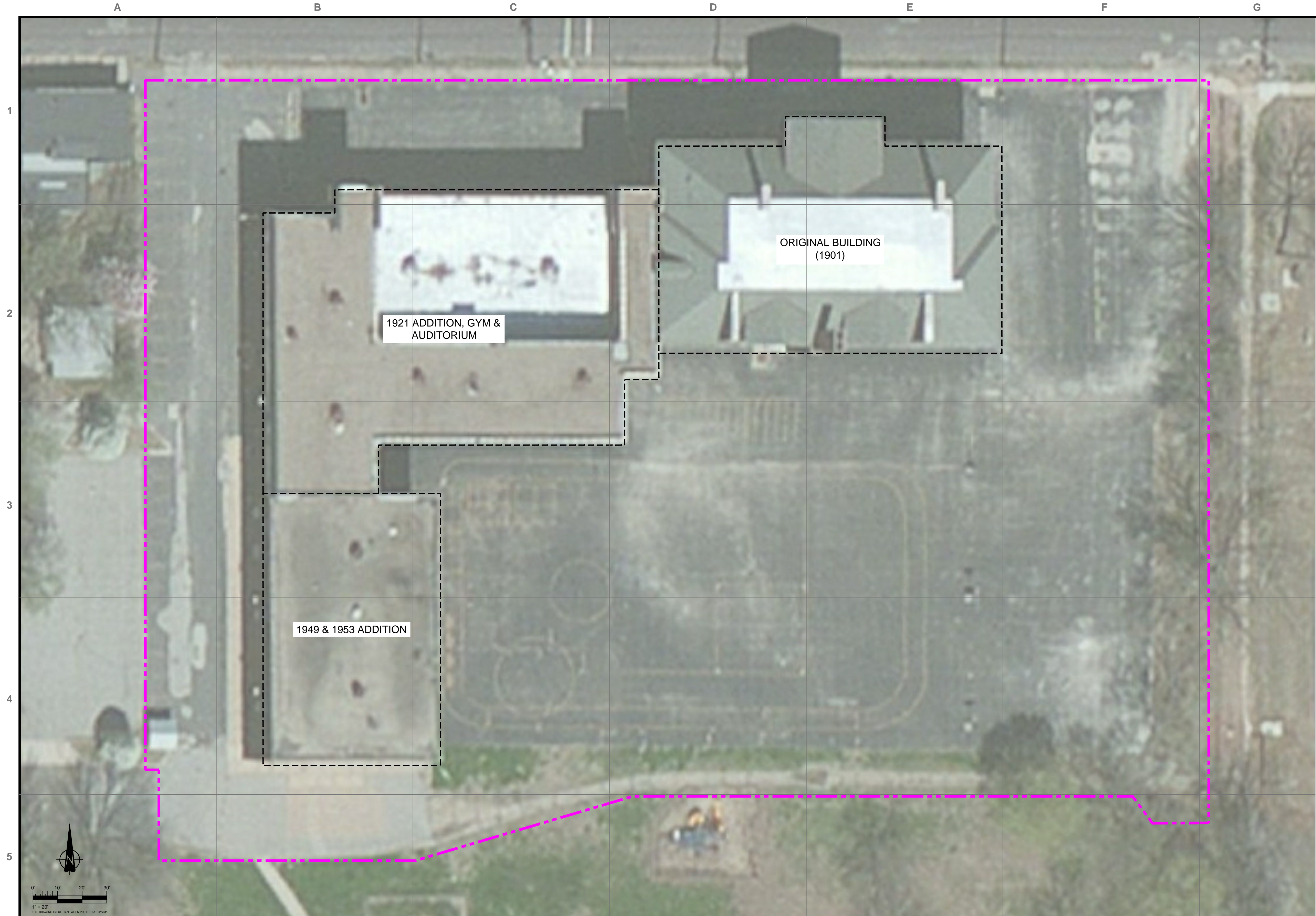
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PROJECTION:	-
DRAWN BY:	SD
REVIEWED BY:	KK
ORIGINAL SCALE:	AS NOTED

CITY OF PEORIA
HARRISON SCHOOL
ABATEMENT, DEMOLITION, AND RESTORATION

TITLE AND DRAWING INDEX SHEET

PROJECT NO.:	3160220019
REVISION NO.:	DRAFT
DATE:	OCTOBER 2022
DRAWING NO.:	G-1
SHEET NO.:	1 of 5

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LEGEND:

 LIMITS OF WORK

GENERAL NOTES:

1. CONTRACTOR TO REFER TO SPECIFICATIONS FOR ALL SITE PLAN RELATED INFORMATION THAT PERTAINS TO THE SCOPE OF WORK.
2. SITE PLAN INFORMATION IS INFORMATIONAL ONLY AND DIAGRAMMATIC. THE DRAWING IS NOT TO SCALE.

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△	07	10	2022	DEMOLITION PLAN	KK	X



CITY OF PEORIA

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Novi, MI, U.S.A. 48377

DATUM: -
PROJECTION: -
DRAWN BY: SD
REVIEWED BY: KK
ORIGINAL SCALE: AS NOTED

CITY OF PEORIA
HARRISON SCHOOL
ABATEMENT, DEMOLITION, AND RESTORATION

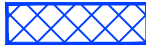

SITE PLAN

PROJECT NO.: 3160220019
REVISION NO. DRAFT
DATE: OCTOBER 2022
DRAWING NO.: D-1
SHEET NO.: 2 of 5

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LEGEND:

-  TO BE DEMOLISHED
-  LIMITS OF WORK

GENERAL NOTES:


1. CONTRACTOR TO REFER TO SPECIFICATIONS FOR ALL SITE PLAN RELATED INFORMATION THAT PERTAINS TO THE SCOPE OF WORK.
2. SITE PLAN INFORMATION IS INFORMATIONAL ONLY AND DIAGRAMMATIC. THE DRAWING IS NOT TO SCALE.

SHEET NOTES:

- ① EXISTING FENCING TO REMAIN.

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△	07	10	2022	DEMOLITION PLAN	KK	X



CITY OF PEORIA

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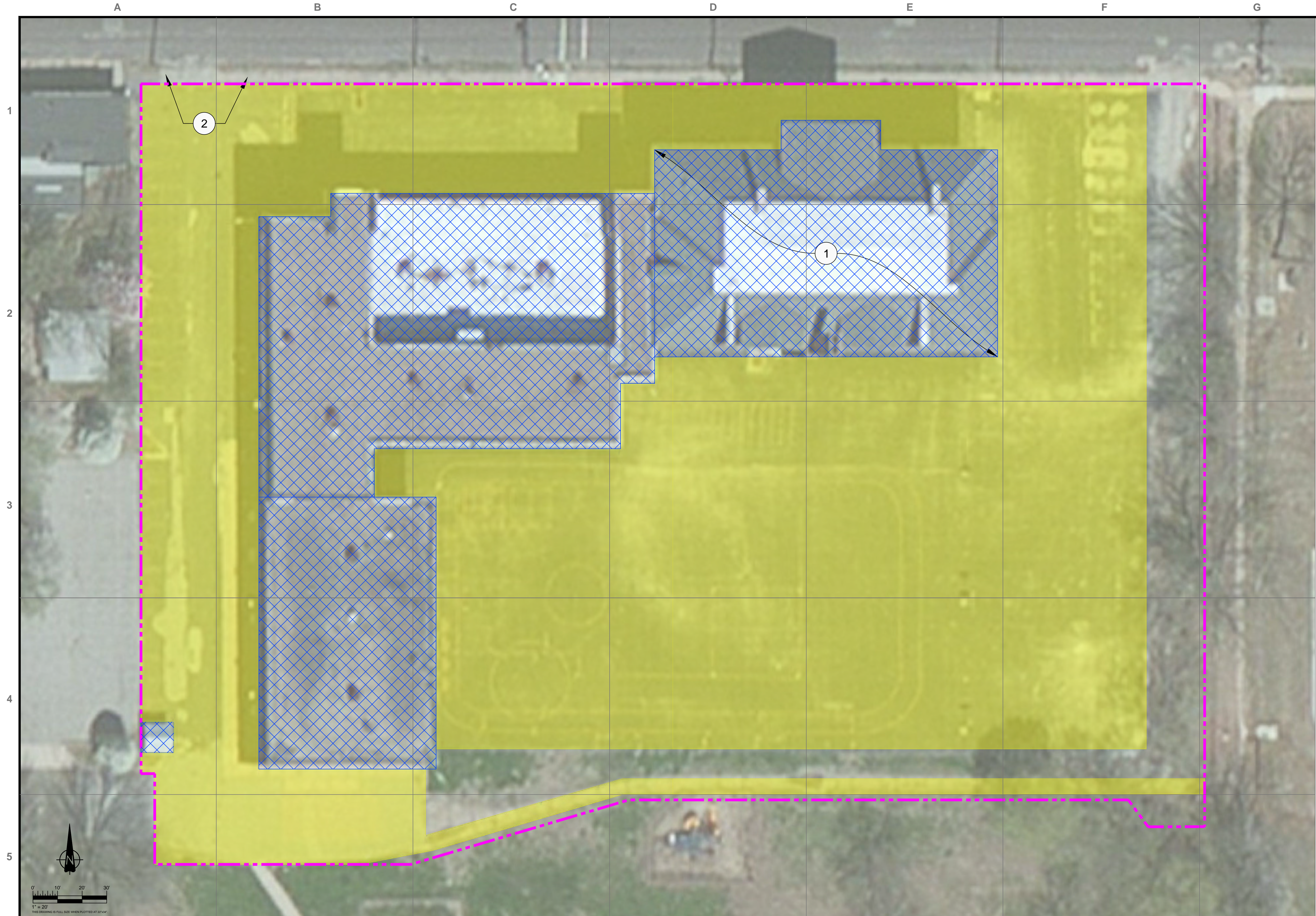
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DRAWN BY:	SD
REVIEWED BY:	KK
ORIGINAL SCALE:	AS NOTED

**CITY OF PEORIA
HARRISON SCHOOL
ABATEMENT, DEMOLITION, AND RESTORATION**

**GENERAL BUILDINGS AND ABOVE GROUND
STRUCTURES DEMOLITION PLAN**

PROJECT NO.:	3160220019
REVISION NO.:	DRAFT
DATE:	OCTOBER 2022
DRAWING NO.:	D-2
SHEET NO.:	3 of 5

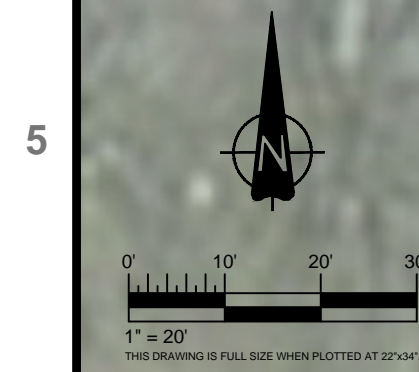
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- LEGEND:**
- FOUNDATION & BASEMENT TO BE REMOVED
 - PAVEMENT TO BE REMOVED
 - LIMITS OF WORK

- GENERAL NOTES:**
1. CONTRACTOR TO REFER TO SPECIFICATIONS FOR ALL SITE PLAN RELATED INFORMATION THAT PERTAINS TO THE SCOPE OF WORK.
 2. SITE PLAN INFORMATION IS INFORMATIONAL ONLY AND DIAGRAMMATIC. THE DRAWING IS NOT TO SCALE.
 3. SITE PLAN DOES NOT SHOW ALL GRADE OR BELOW GROUND STRUCTURES AND FEATURES TO BE DEMOLISHED. IN GENERAL, CONCRETE SLABS AND FOUNDATIONS SHALL BE REMOVED FOR ALL ABOVE GROUND STRUCTURES AND FEATURES WITHIN THE JOBSITE BOUNDARY UNLESS OTHERWISE SPECIFIED. SEE TECHNICAL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
 4. SEE TECHNICAL SPECIFICATIONS FOR REMOVAL AND ABANDONMENT OF DESIGNATED BELOW GRADE PIPING AND UTILITIES.

- SHEET NOTES:**
- ① BASEMENT TO BE REMOVED IN FULL.
 - ② EXISTING SIDEWALK AND DRIVEWAY TO REMAIN.



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△	07	10	2022	DEMOLITION PLAN	KK	X

CITY OF PEORIA	
WSP USA 46850 Magellan Drive, Ste 190 Novi, MI, U.S.A. 48377	

DATUM:	-
PROJECTION:	-
DRAWN BY:	SD
REVIEWED BY:	KK
ORIGINAL SCALE:	AS NOTED

CITY OF PEORIA HARRISON SCHOOL ABATEMENT, DEMOLITION, AND RESTORATION	
GRADE & BELOW GROUND STRUCTURES DEMOLITION PLAN	

PROJECT NO.:	3160220019
REVISION NO.:	DRAFT
DATE:	OCTOBER 2022
DRAWING NO.:	D-3
SHEET NO.:	4 of 5

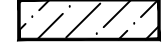

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LEGEND:

-  RESTORATION AREA
-  LIMITS OF WORK

GENERAL NOTES:

1. CONTRACTOR TO REFER TO SPECIFICATIONS FOR ALL SITE PLAN RELATED INFORMATION THAT PERTAINS TO THE SCOPE OF WORK.
2. SITE PLAN INFORMATION IS INFORMATIONAL ONLY AND DIAGRAMMATIC. THE DRAWING IS NOT TO SCALE.
3. ALL DISTURBED AREAS SHALL BE RESTORED AS SPECIFIED IN THE TECHNICAL SPECIFICATIONS. IN GENERAL, AREAS SHALL BE RESTORED IN A MANNER THAT PROVIDES POSITIVE STORM DRAINAGE.


SHEET NOTES:

- ① FILL SHALL BE PLACED ABOVE EXISTING GRADE, GRADED TO ACHIEVE POSITIVE DRAINAGE OF STORM WATER, AND SEEDED.

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REV	DATE	MONTH	YEAR	REVISION DESCRIPTION	ENG.	APPR.
△	07	10	2022	DEMOLITION PLAN	KK	X



CITY OF PEORIA

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46850 Magellan Drive, Ste 190
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DATUM:	-
PROJECTION:	-
DRAWN BY:	SD
REVIEWED BY:	KK
ORIGINAL SCALE:	AS NOTED

**CITY OF PEORIA
HARRISON SCHOOL
ABATEMENT, DEMOLITION, AND RESTORATION**

RESTORATION PLAN

PROJECT NO.:	3160220019
REVISION NO.:	DRAFT
DATE:	OCTOBER 2022
DRAWING NO.:	D-4
SHEET NO.:	5 of 5

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APPENDIX A

Studies and Surveys

May 3, 2022

Kathryn Murphy
Grants and Budget Manager
City of Peoria
City Hall, Room 203
419 Fulton Street
Peoria, IL 61602

**Reference: Pre-Demolition Site Characterization: Asbestos-Containing Materials, Lead-Bearing Paint and Regulated Hazardous Building Material Inventory Surveys, Former Harrison School Building
2702 West Krause Avenue, Peoria, Illinois
EPA Brownfield Cooperative Agreement No.: BF00E02712
EPA ACRES No.: 250276**

Dear Kathryn Murphy:

The results of Pre-Demolition: Asbestos-containing Materials (ACM), Lead-Bearing Paint (LBP), and Regulated Hazardous Building Material (RHBM) surveys performed at the Former Harrison School Building located at 2702 West Krause Avenue, Peoria, Illinois (the "Property") are provided herein. The purpose for the assessment was to determine if hazardous building materials and/or restricted wastes are present at the Property in anticipation of demolition and future redevelopment.

The work was funded through a United States Environmental Protection Agency (EPA) Brownfields Assessment Grant awarded to the City of Peoria (the "City") in 2019 (Cooperative Agreement No. BF00E02712). The work was completed using hazardous substances funding. Hazardous substances funding was approved by the EPA on July 8, 2021. The EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES) number for the Property is 250276. The scope of work performed was consistent with the Site-Specific Sampling and Analysis Plan (SSSAP; Stantec, 2021a), which was approved by the EPA via email on December 15, 2021.

BACKGROUND INFORMATION

The Property is currently owned by Solar Advantage, LLC and consists of one approximately 3.33-acre parcel of land as shown on Figure 1. A one- to three- story, 32,669-square foot school building constructed in 1901 is located in an L-shape on the western and northern portions of the Property as depicted on **Figure 2**. Additions were built in 1922 and 1949. The school closed in 2010 and the Property has remained vacant since. West Krause Avenue adjoins the Property to the north followed by the new Harrison Primary School, residential properties adjoin the Property to the east, commercial/residential properties to the west, and a vacant grass lot adjoins the Property to the south. Parcel information is summarized below:

Address	Parcel Number	Owners	Size (acres)	Zoning
2702 West Krause Avenue	1819126010	Solar Advantage, LLC	3.33	0060 – Improved Commercial

Stantec completed a Phase I environmental site assessment (ESA) of the Property on February 16, 2021, and two recognized environmental conditions (RECs) and two business environmental risks (BERs) was found in connection with the Property (Stantec, 2021b).

The RECs included:

- *Coal storage was observed in the basement area and is likely related to historical heating operations. Several gasoline engines, which may have been related to the use of steam heat, were present in the building in 1902. Other heating methods such as fuel oil may have been used over the years. These heating sources may have released hazardous substances and/or petroleum to the surrounding environment.*
- *The Reinmann Bros Planing Mill historically adjoined the Property between 1925 and 1936, which included lumber storage, dry kilns, and wood working machines. Given the proximity of this planing mill and the potential for hazardous (such as pentachlorophenol or arsenic) and/or petroleum substances to have been released to the surrounding environment.*

The BERs included:

- *Based on the age of the current building, it is possible that ACM, LBP and other RHBM were used in their construction or maintenance.*
- *Many tires were observed in the basement of the building during site reconnaissance.*

Based on the age of the buildings at the Property, additional investigation was needed to determine if they contained ACMs, LBP, and other RHBM in anticipation of Property demolition/redevelopment.

ACM, LBP, AND RHBM SURVEYS

The surveying, sampling and analysis of building materials for ACM and LBP was completed by Environmental Works, Inc. (EWI) under contract to Stantec in general compliance with the SSSAP (Stantec, 2021a). EWI also provided an inventory and location of other restricted wastes observed in the building which could be considered hazardous waste and/or require special handling (e.g., mercury containing thermostats, switches, fluorescent light bulb, polychlorinated biphenyls-containing transformers; oil door closures; treated lumber; electronics; paints/solvents; etc.). Site activities were conducted by Andrew Barchack and Matt Honerkamp of EWI on March 9, 2022. The EWI report is provided as **Attachment A** and summarized below.

ACM

ACM were identified throughout the structure. EWI recommended the removal or repair of damaged ACMs to prevent further damage and exposure to asbestos containing fibers. EWI also recommended the removal of ACMs that may be disturbed during future construction, renovation, and/or demolition activities in accordance with EPA, U.S. Occupational Safety and Health Administration, State of Illinois, and local regulatory requirements.

LBP

LBP was identified throughout the structures. EWI recommends the LBP in poor condition be stabilized or abated prior to renovation or demolition work and that the work be performed by an Illinois Department of Public Health (IDPH)-licensed abatement contractor. Materials containing LBP must be characterized and disposed properly as part of demolition.

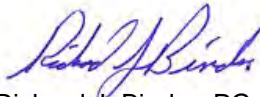
RHBM

Wastes including one gallon or less containers of mineral spirits, sealants, oil, and insecticides were observed in the building. EWI also observed fluorescent light bulbs possibly containing mercury, fluorescent light ballasts potentially containing polychlorinated biphenyls (PCBs), and other waste materials in the building. These materials should be disposed of in accordance with applicable federal, state, and local regulations and removed prior to site demolition. Air conditioner compressors, hot water heater, and electronic devices (television, computers) were also observed in the building. This equipment should be properly maintained and when not in use, recycled or disposed of in accordance with regulations.

We trust this information meets your needs. If you have any questions, or require any additional information, please contact us.

Respectfully,

STANTEC CONSULTING SERVICES INC.



Richard J. Binder, PG, CPG
Principal
Tel: 262-643-9010
Email: rick.binder@stantec.com



Erin Gross, PG
Staff Geologist
Tel: 262-665-4043
Email: erin.gross@stantec.com

Figures

Figure 1 – Property Location Map

Figure 2 – Property Vicinity Map

Attachments

Attachment A – Environmental Works, Inc. Hazardous Materials Survey Report

References

Stantec Consulting Services Inc., (Stantec, 2021a), "Site-specific Sampling and Analysis Plan, Old McKinley School, Old Harrison School, and Former Methodist Family Child Care Center", Peoria, Illinois 61605 (dated November 23, 2021)

Stantec Consulting Services Inc., (Stantec, 2021b), "Phase I Environmental Site Assessment Report, Old Harrison School, 2702 West Krause Avenue, Peoria, Illinois 61605" (dated February 16, 2021).

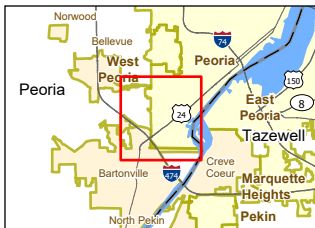
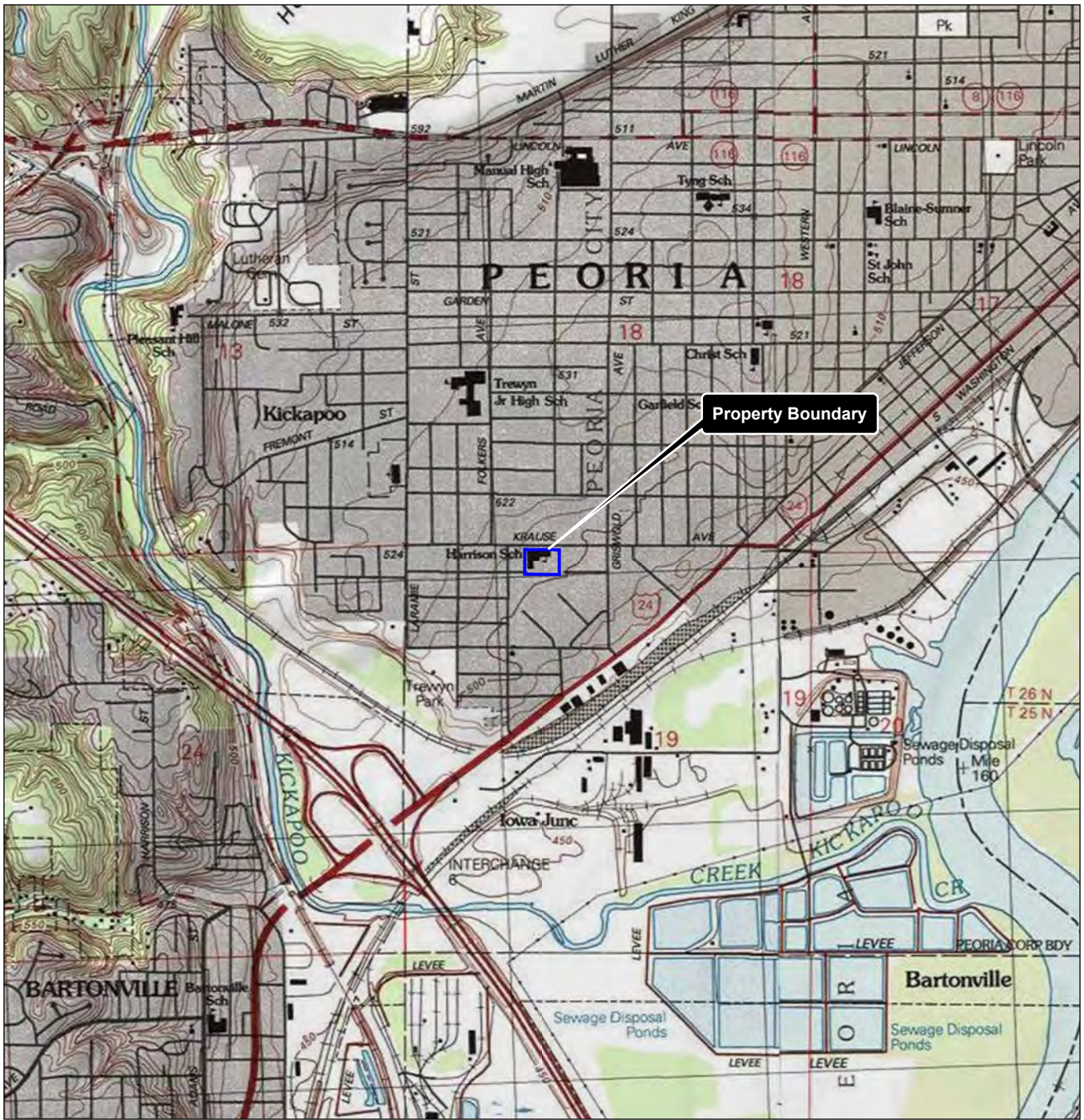
Limitations

This work was performed in accordance with generally accepted practices of the profession for performing similar studies at the same time and in the same geographical area. Stantec observed that degree of care and skill generally exercised by the profession under similar circumstances and conditions. No other warranty is expressed or implied.

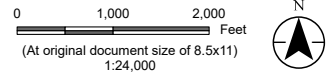
Stantec observations, findings, and opinions must not be considered as scientific certainties, but only an opinion based on our professional judgment concerning the significance of the data gathered during the course of the investigation. Specifically, Stantec does not and cannot represent that the Property contains no hazardous or toxic materials or other latent condition beyond that observed by Stantec.

This document was prepared by Stantec for the City of Peoria. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibilities of such third parties. Stantec accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

FIGURES



Legend
 Property Boundary



Project Location
 T8N, R8E, S19
 C. of Peoria, Peoria Co., IL

Prepared by AJG on 2021-11-17
 TR by MZ on 2021-11-18
 IR by EG on 2022-04-29

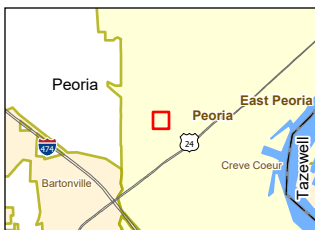
Client/Project
 Old Harrison School
 2702 W Krause Ave
 Pre-Demolition Site Characterization

193707589

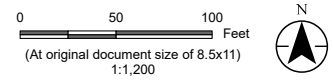
Figure No.
 1

Title
Property Location and Local Topography

Notes
 1. Coordinate System: NAD 1983 StatePlane Illinois West FIPS 1202 Feet
 2. Data Sources: Stantec, City of Peoria, NADS, USGS
 3. Background: USGS 7.5' Topographic Quadrangles



- Legend**
- Property Boundary
 - Parcel Boundary



Project Location
T&N, R8E, S19
C. of Peoria, Peoria Co., IL

Prepared by AJG on 2021-11-17
TR by MZ on 2021-11-18
IR by EG on 2022-04-29

Client/Project
Old Harrison School
2702 W Krause Ave
Pre-Demolition Site Characterization

193707589

Figure No.
2

Title
Property Vicinity Map

- Notes**
1. Coordinate System: NAD 1983 StatePlane Illinois West FIPS 1202 Feet
 2. Data Sources: Stantec, City of Peoria, NADS, USGS
 3. Orthophotography: Peoria 2019

ATTACHMENT A

Environmental Works, Inc. Hazardous Materials Survey Report

HAZARDOUS MATERIALS SURVEY

**FORMER HARRISON SCHOOL BUILDING
2702 WEST KRAUSE AVENUE
PEORIA, ILLINOIS**

Prepared For:

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EWI Project #220669

April 21, 2022

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1.0 INTRODUCTION

Environmental Works, Inc. (EWI) performed a Hazardous Materials Survey on the former Harrison School property building located at 2702 West Krause Avenue, Peoria, Illinois (Site). The Hazardous Materials Survey included an asbestos inspection, lead-based paint (LBP) survey, and a waste inventory. Mr. Andrew Barchak and Mr. Matt Honerkamp conducted the survey activities on March 9, 2022. The location of the Site is displayed on Figure 1.0.

1.1 Survey Objectives

The purpose of the survey was to determine the presence, location, condition, and quantity of asbestos containing materials (ACM), LBP, and waste materials within the buildings, so that they can be managed properly during daily activities and future demolition/renovation activities. The asbestos inspection was conducted in accordance with the National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations. The LBP survey was conducted generally in accordance with the procedures specified in the Housing and Urban Development (HUD) Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing by a State of Illinois licensed Risk Assessor. An inventory of waste materials was conducted to document locations, quantities, and conditions of materials that could potentially be considered hazardous waste and/or require separate disposal from construction/demolition materials.

1.2 Building Description

The Site consists of an approximately 32,669 square foot (ft²) 3-story brick building with 3 phases of construction dated 1901, 1922 and 1949. The structure was previously occupied by the Harrison School. The remaining portions of the Site are concrete sidewalks, asphalt parking and grass and tree-covered land.

The building consists of concrete block walls in the basement and concrete and brick frame construction with brick exterior on the remaining levels. The 1901-phase is constructed with an asphalt shingle-covered pitched roof and the 1922 and 1949-phases were constructed with flat unballasted EPDM roofs. The interior of the building consists of wood floors and/or exposed concrete and vinyl flooring. A majority of the walls are painted plaster with a limited amount of painted drywall. Plaster ceilings are located above.

1.3 Previous Reports and Documentation

Prior to conducting the inspection, EWI requested documentation of previous inspections, sampling, or abatement activities conducted at the Site. No records were available for review.

2.0 ASBESTOS INSPECTION

The asbestos inspection was conducted in accordance with the NESHAP regulations and Illinois Department of Public Health (IDPH) regulations for inspections. The inspection was completed by an Asbestos Hazard Emergency Response Act (AHERA) accredited State licensed inspector. Copies of the inspector's licenses are provided in Appendix A.

2.1 Purpose

The air toxics provisions of the Clean Air Act (CAA) require US EPA to develop and enforce regulations to protect the public from exposure to airborne contaminants that are known to be hazardous to human health. In accordance with Section 112 of the CAA, US EPA established the Asbestos NESHAP (40 CFR Part 61, Subpart M) to include specific compounds or hazardous air pollutants (HAP) that are known or suspected to cause cancer or other serious health effects. Asbestos was one of the first HAPs regulated under the air toxics program and were amended to cross-reference citations to US Occupational Safety and Health Administration (US OSHA), US Department of Transportation (US DOT) and US EPA requirements for disposal of asbestos waste.

NESHAP regulations require a thorough inspection where demolition or renovation operation will occur and the owner or operator of a commercial building to notify the regulatory authority before permanent removal (abatement) of certain thresholds and types of regulated asbestos-containing materials (RACM). The IDPH is delegated authority by US EPA to regulate and enforce renovation and demolition projects involving RACM. The US EPA and IDPH require a thorough inspection of all regulated structures that will be subject to renovation or demolition by an Illinois certified asbestos inspector to determine if any ACMs are present. Additionally, the US EPA requires building inspectors be accredited under the AHERA.

US EPA and IDPH define ACM as any material containing more than 1% asbestos. Materials containing <1% asbestos do not meet the definition of ACM under US EPA NESHAP; however, are regulated by US OSHA.

ACMs are distinguished between friable or non-friable forms. Friable ACMs are materials that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Non-friable ACMs can release fibers when damaged or disturbed, therefore EPA has defined two categories of non-friable ACM. RACM includes friable ACMs, Category I nonfriable ACM that has become friable, Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or Category II nonfriable ACM that has a high probability of becoming or has become crumbled,

pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

2.2 Inspection Activities

EWI conducted a visual survey of the Site prior to sampling to determine the presence, location, and condition of suspect ACMs. The suspect ACMs were grouped into homogeneous sampling areas, which are defined as an area of suspect materials that appear to be similar throughout in appearance, color, texture, and material construction/application dates.

EWI inspected the accessible areas of the interior and exterior of the Site where suspect asbestos materials may be present. The inspection included common areas, utility spaces, mechanical rooms, attics, above ceilings, and throughout pipe chases, as access allowed and within the agreed upon scope of work for the project. Based on the nature of this inspection, EWI used destructive sampling methods to complete the inspection.

A significant portion of the building's rooms were unable to be accessed due to safety concerns. On this basis, EWI's assumptions about positive materials should be considered across all sections of the building.

2.3 Sample Protocol

EWI collected bulk samples of homogenous suspect ACMs identified during the visual reconnaissance to confirm or deny the presence of asbestos and provide a comprehensive understanding of quantities, condition, and locations of ACMs throughout the building. The number of samples collected for each homogenous material was dependent on the type of material, estimated quantity of the material and material locations, and inspector judgment.

Care was taken to prevent cross-contamination of collected samples. The bulk samples were placed into individual sample containers and labeled with individual laboratory identification numbers. A unique sample identification number was assigned to each sample. The sample identification numbers, notes pertaining to the material description, condition, and sample location of the suspect materials were recorded on the field forms.

The samples were shipped via overnight carrier under proper chain-of-custody protocol and analyzed for asbestos by Environmental Microbiology Laboratory, Inc., Aerotech Laboratories, Inc., (EMLab P&K) of Phoenix, Arizona, a National Voluntary Laboratory Accreditation Program (NVLAP)-certified laboratory.

2.4 Laboratory Analytical Method

Bulk samples were analyzed using Polarized Light Microscopy (PLM) in conjunction with Dispersion Staining (DS) techniques, as outlined in USEPA Method, 600/R-93-116. The PLM Summary Report from the laboratory provides the type and percentage of asbestos (if any), as well as the type and percentage of other non-asbestos fibers. The PLM Summary Report is included in Appendix C.

2.5 Suspect Asbestos-Containing Materials

EWI identified 36 homogenous suspect materials and collected 88 samples for laboratory analysis. An Asbestos Sample Summary is provided as Table 1.0 and includes the complete list of suspect ACMs observed and sampled, sample ID numbers, material descriptions, sample locations, and analytical results. Sample Locations are provided on Figures 2.0 through 2.3.

2.6 Sample Results

Materials determined to contain greater than one percent (>1%) of any type of asbestos fibers are considered an ACM by the US EPA. Materials containing less than one percent (<1%) of asbestos fibers do not meet the definition of ACM under US EPA NESHAP; however, are regulated by US OSHA.

Based on the analytical results, 20 samples were identified with >1% asbestos. Additionally, 5 samples were identified with <1% asbestos. The following table provides a list of the samples containing asbestos or assumed to be ACM and the material locations, condition, and approximate quantities identified at the Site. Photographic documentation of the ACM identified at the Site during the inspection is included in Appendix B.

ACMs Sample Summary

Sample ID	Material	Sample Location	Analytical Results - Laboratory Description
1	White/Pink Floor Tile + Black Mastic	1901 Building, Basement, Floor, NW Classroom	5% Chrysotile – Off-White Floor Tile
			7% Chrysotile – Black Mastic
			5% Chrysotile – Brown Floor Tile
			7% Chrysotile – Black Mastic
2	White/Pink Floor Tile + Black Mastic	1901 Building, Basement, NE Classroom	5% Chrysotile – Off-White Floor Tile
			7% Chrysotile – Black Mastic
			5% Chrysotile – Brown Floor Tile
			7% Chrysotile – Black Mastic
5	Window Glazing	1901 Building, Basement, Window Common Area	<1% Chrysotile – Gray Window Glazing
6	Window Glazing	1901 Building, Basement, Window Common Area	<1% Chrysotile – Gray Window Glazing

Sample ID	Material	Sample Location	Analytical Results - Laboratory Description
19	TSI AirOCeIl Wrap	1901 Building, Basement, Floor Common Area	70% Chrysotile – White/Brown Insulation
20	TSI AirOCeIl Wrap	1901 Building, Basement, Ceiling, SW Classroom	<1% Amosite – Gray/White Insulation
21	TSI AirOCeIl Wrap	1901 Building, Basement, Floor, NE Classroom	70% Chrysotile – White/Brown Insulation
29	Floor Felt + White Paper	1901 Building, 1 st Floor, Floor, SW Classroom	80% Chrysotile – White Paper
30	Floor Felt + White Paper	1901 Building, 1 st Floor, Floor, N Classroom	80% Chrysotile – White Paper
31	Floor Felt + White Paper	1901 Building, 1 st Floor, Floor, W Exit Stairs	80% Chrysotile – White Paper
32	White Floor + Mastic	1901 Building, 1 st Floor, Floor, NW Classroom	5% Chrysotile – Off-White Floor Tile
38	Drywall Composite-1 (drywall/tape /joint compound)	1901 Building, 1 st Floor Common Area Wall	<1% Chrysotile – White Compound with Multilayered Paint*
			<1% Chrysotile – White Joint Compound*
39	Drywall Composite-1 (drywall/tape /joint compound)	1901 Building, 1 st Floor, Common Area Wall	<1% Chrysotile – White Compound with Multilayered Paint*
			<1% Chrysotile – White Joint Compound*
44	Grey Floor Tile + Mastic	1922 Gymnasium, Floor	5% Chrysotile – Gray Floor Tile
			7% Chrysotile – Black Mastic
45	Grey Floor Tile + Mastic	1922 Gymnasium, Floor	5% Chrysotile – Gray Floor Tile
			7% Chrysotile – Black Mastic
48	Green Floor Tile + Mastic	1922 Gymnasium, Hallway Floor	5% Chrysotile – Green Floor Tile
			7% Chrysotile – Black Mastic
49	Green Floor Tile + Mastic	1922 Gymnasium, Hallway Floor	5% Chrysotile – Green Floor Tile
			7% Chrysotile – Black Mastic
52	TSI AirOCeIl Wrap	1922 Building, 1 st Floor, Ceiling, NW Classroom	80% Chrysotile – Off-White Wrap
53	TSI AirOCeIl Wrap	1922 Building, 2 nd Floor, Floor, W Classroom	80% Chrysotile – Off-White Wrap
54	TSI AirOCeIl Wrap	1922 Building, 3 rd Floor, Floor, NE Hallway	80% Chrysotile – Off-White Wrap
64	Cove Base + Mastic	1922 Building, 1 st Floor, Wall, Bathroom	8% Chrysotile – Black Baseboard Tile
			10% Chrysotile – Black Mastic
65	Cove Base + Mastic	1922 Building, 1 st Floor, Wall, Bathroom	8% Chrysotile – Black Baseboard Tile
			10% Chrysotile – Black Mastic
66	White Floor + Mastic	1922 Building, 1 st Floor, Floor, Bathroom	6% Chrysotile – White Floor Tile
67	White Floor + Mastic	1922 Building, 1 st Floor, Floor, Bathroom	6% Chrysotile – White Floor Tile
69	Red Floor Tile + Black Mastic	1922 Building, 2 nd Floor, Floor, Hallway	6% Chrysotile – Orange Floor Tile
			8% Chrysotile – Black Mastic

NS = Not Sampled (Assumed)

* <1% Asbestos – Composite Fibrous Content

The following thermal system insulation (TSI) materials were determined to contain asbestos:

- The pipe insulation and mudded joint fittings were identified limited amounts on pipes and scattered throughout the floor of all levels of the 1901 and 1922 buildings. Pipe insulation was observed in damaged condition with areas of significantly damaged material in the basement. The material was also observed in scattered debris on the floor; the debris is assumed to be asbestos containing. These materials were not observed on the remaining accessible piping throughout the building as the piping and insulation were removed; however, the piping debris was observed scattered on the floor and is also assumed to be located in areas that were inaccessible during this survey, including but not limited to: rooms with unsafe access, vertical utility chases; and within plaster perimeter walls and ceilings.
- The floor felt insulation was identified between wood flooring on all levels of the 1901 building.

The following miscellaneous materials were determined to contain asbestos:

- White/Brown floor tile with black mastic was observed within the two north classrooms in the basement of the 1901 building. Generally, the flooring materials observed appeared to be in good condition.
- Grey/Green/White/Red-Orange floor tile with black mastic was observed within the gymnasium and adjoining hallways, staircases, and classrooms of the 1922 and 1949 buildings. It is assumed all unsampled vinyl/tile flooring materials throughout the building contain asbestos because the material may be present in units not inspected during this inspection or below surface layers of flooring not visible during this inspection. Generally, the flooring materials observed appeared to be in good condition.
- Black baseboard (cove base) with black mastic was observed within all common bathroom walls of the 1922 building. Generally, the wall materials observed appeared to be in good condition.

The following materials were identified as <1% asbestos containing (does not meet the definition of ACM under US EPA NESHAP, but regulated by OSHA):

- The window caulk was determined to be <1% asbestos containing.

- The drywall joint compound associated with drywall system samples was determined to be asbestos containing; however, when reported as a composite material (drywall/compound) per NESHAP, the drywall system contains <1% asbestos.

The following materials were not sampled and are assumed to be ACMs (per the NESHAP rule, suspect miscellaneous ACM must be assumed to be ACM, unless proven otherwise by appropriate bulk sampling and laboratory analyses):

- Transite wall panels were observed on all sides of the upper exterior walls of the 1901 building, below the roofing systems. The transite is assumed to be asbestos-containing and was observed in good condition.
- EWI did not conduct sampling of roofing materials associated with the 1922 and 1947 building due to access and structural integrity; therefore, roofing materials are assumed to be asbestos-containing.

3.0 LEAD-BASED PAINT SURVEY

The testing protocol utilized during this inspection focused on a surface investigation for the presence of LBP. The survey was conducted in general accordance with the HUD Guidelines for the Evaluation and Control of Lead-Based Paint in Housing (June 1995), updated Chapter 7 (July 2012). Accessible interior and exterior surfaces of the building (ceilings, walls, doors, door frames, windows framing, trim, and accessories [pipe hangers, air duct grates, etc.]) were tested for the presence of LBP.

3.1 Inspected Areas

The exposed accessible painted surfaces throughout the buildings of the Site were inspected for LBP. The LBP Survey Record Sheet provided as Table 2.0 details the field data including colors, locations, substrates, conditions, rooms, and X-ray fluorescence (XRF) results obtained during this LBP survey.

3.2 Sample Collection Procedures/Methodology

The Site was surveyed to determine the presence, location, condition, and lead content of the painted/stained and or metal surfaces. The inspection utilized an XRF analyzer (Heuresis – Pb200i, Serial #2698). The performance of the XRF analyzer was checked against a standard, pursuant to the manufacturer's specifications, by analyzing pre-determined lead paint sample chips produced by the National Institute of Standards and Testing (NIST). These quality control measures produce a 95% confidence level that XRF readings accurately reflect the actual level of lead in the tested surfaces. The XRF was checked against the standardized paint chips every time it was turned on, every four (4) hours thereafter and prior to shutting the device off. A copy of the XRF Performance Characteristic Sheet and the User's Certification are included in Appendix D.

Each side of the building is assigned a letter (Side 'A', Side 'B', Side 'C', and Side 'D'). The side of the building where the front entrance is located is designated Side 'A'. The three remaining sides of the building are labeled clockwise as follows: standing inside the building, with back to the front entrance (the 'A' side), the side on the left is 'B', the rear side is 'C', and the side to the right is 'D'. For exterior surfaces, when facing the front entrance of the building, the front entrance side is 'A', and, proceeding clockwise, the left side is 'B', the rear side is 'C', and the right side is 'D'.

Within the building, the sides of each room are assigned letters in the same way as the interior as a whole. That is, when standing in any interior room, with the front entrance of the building behind where one is standing, the side which is parallel to the front entrance is designated side 'A', and, again proceeding clockwise, the side on the left is 'B', the side facing (parallel to the rear side of the building) is 'C', and the right side is 'D'. A description of XRF field data is included in Appendix E.

Test locations were selected based on observed painted/stained surfaces at the Site and accessibility for the XRF unit. By conducting a random sampling of the buildings and statistically analyzing the results of the XRF data, the existence and location of LBP at the Subject Site is identified.

3.3 XRF Results

According to the US EPA and HUD, positive detections of LBP is defined as XRF measurements greater than or equal to 1.0 milligrams per square centimeter (mg/cm²). Table 2.0 LBP Survey Record Sheet provides a complete list of XRF results and description of the testing combinations. The number assigned to each room is provided on Figures 2.0 and 2.3 and a description of XRF field data including paint condition, building description, and room designation are provided in Appendix E.

The following XRF readings were greater than 1.0 mg/cm² and determined to be lead-based:

Reading Number	Building/Floor	Room	Substrate/Material	Paint color	Condition	XRF Result (lead in mg/cm ²)
114	1901-Bsmt	Northwest Corner-Classroom	Brick Wall	Beige	Deteriorated	10.7
116	1901-Bsmt	Southwest Corner-Classroom	Wood Door Casing	Brown	Deteriorated	20.1
119	1901-Bsmt	Southeast Corner-Storage	Wood Chair Rail	Brown	Deteriorated	8.8
123	1901-Bsmt	East Foyer	Wood Door Casing	Brown	Deteriorated	9.7
125	1901-Bsmt	West Foyer	Wood Window Frame	Brown	Deteriorated	15.6
130	1901-Bsmt	West Side-Storage	Wood Chair Rail	Beige	Deteriorated	9.2
134	1901-Bsmt	West Side-South Storage	Wood Wall	Green	Deteriorated	15.0
135	1901-1 st	Northeast Corner-Classroom	Plaster Wall	Beige	Deteriorated	1.3
139	1901-1 st	Northeast Corner-Coatroom	Plaster Wall	Beige	Deteriorated	14.0
141	1901-1 st	Teachers Workroom	Plaster Lower Wall	Beige	Deteriorated	15.3
142	1901-1 st	Teachers Workroom	Wood Windowsill	Yellow	Deteriorated	37.0
146	1901-1 st	Northwest Classroom	Plaster Lower Wall	Beige	Deteriorated	15.1
150	1901-1 st	Southwest Classroom	Plaster Lower Wall	Beige	Deteriorated	15.2
152	1901-1 st	South Corner Classroom	Plaster Lower Wall	Beige	Deteriorated	17.0
154	1901-1 st	Southeast Classroom	Plaster Lower Wall	Beige	Deteriorated	14.4
156	1901-1 st	Southeast Classroom	Plaster Ceiling	Beige	Deteriorated	1.7
159	1901-1 st	Foyer	Plaster Lower Wall	Beige	Deteriorated	14.4
165	1901-2 nd	East Stairwell	Plaster Lower Wall	Beige	Deteriorated	17.3
173	1901-2 nd	Northwest Classroom	Plaster Upper Wall	Beige	Deteriorated	1.4

Reading Number	Building/Floor	Room	Substrate/Material	Paint color	Condition	XRF Result (lead in mg/cm ²)
174	1901-2 nd	Northwest Classroom	Plaster Lower Wall	Beige	Deteriorated	14.3
176	1901-2 nd	Southwest Classroom	Plaster Lower Wall	Beige	Deteriorated	14.3
178	1901-2 nd	South Center Classroom	Plaster Lower Wall	Beige	Deteriorated	12.4
181	1901-2 nd	Foyer	Plaster Lower Wall	Beige	Deteriorated	17.3
187	1901-3 rd	Foyer	Plaster I-Beam	Beige	Deteriorated	5.3
196	1922-Gym	Stage South Storage	Plaster Wall	Beige	Deteriorated	2.3
197	1922-Gym	North Stage Runway	Plaster Wall	Brown	Deteriorated	2.3
200	1922-1 st	North Center Bathroom	Ceramic Tile Wall	Green	Deteriorated	4.5
203	1922-1 st	Northeast Bathroom	Ceramic Tile Wall	Green	Deteriorated	3.3
204	1922-2 nd	West Stairwell	Plaster Wall	Brown	Deteriorated	2.0
217	1922-3 rd	East Hall-SW Classroom	Plaster Wall	Red	Deteriorated	2.2
227	1949-1 st	West Center Classroom	Ceramic Wall	Beige	Deteriorated	2.9
232	1949-1 st	South Hallway	Ceramic Wall	Beige	Deteriorated	3.2

4.0 WASTE INVENTORY

EWI completed an inventory of waste materials observed at the Site that could potentially be considered hazardous waste and/or require separate disposal from construction/demolition materials. The inventory included the following types of materials: fluorescent light bulbs possibly containing mercury, fluorescent light ballasts potentially containing polychlorinated biphenyls (PCBs), and other waste materials that may need to be removed prior to the site activities for demolition/renovation.

EWI went through each room of the buildings identifying, categorizing, and quantifying the hazardous materials. Additionally, the exterior of the Site was visually inspected for drums or other large containers that may contain hazardous waste.

The following table summarizes the hazardous materials inventory completed at the Site. Representative photographs are included in Appendix B.

2702 West Krause Avenue, Peoria, Illinois	
Fluorescent Light Bulbs and Ballasts	
	Based on the approximate age of the building, it is possible the fluorescent lighting ballasts contain PCBs. Fluorescent light bulbs contain mercury and must be disposed of as universal waste. Approximately 40 fluorescent light bulb ballasts and approximately 60 fluorescent light bulbs were observed throughout the buildings.
Exit Signs	
	20 exit signs were observed throughout the buildings.
Solid waste	
	Solid waste (household trash) was observed throughout the building, no illegal or regulated materials were observed in the unit. Two large piles of automobile tires were staged inside the 1922 portion of the building, one located in the former boiler room, and one located in a hallway adjacent to the gymnasium.

5.0 CONCLUSIONS AND RECOMMENDATIONS

On March 9, 2022, Andrew Barchak and Mr. Matt Honerkamp performed a Hazardous Materials Survey including an asbestos inspection, LBP survey, waste inventory on former Harrison School building located at 2702 West Krause Avenue, Peoria, Illinois.

5.1 Asbestos Inspection

The following table summarizes the homogeneous materials confirmed or assumed to be a RACM, and the locations, conditions, and the approximate quantities:

Material	Material locations	Friable	Condition ¹	Approximate Quantity (feet) ²
Pipe runs and fittings insulation	Situated throughout the 1901 and 1922 building's floors, ceilings, and pipe chases	Yes	Damaged to Significantly Damaged	Unknown
Floor insulation	In between wood flooring on all levels of the 1901 building	No	Good	16,000 sq ft
Floor tile and mastic	Basement of the 1901 building, hallways, staircases, and classrooms within the 1922 and 1947 buildings	No	Damaged	45,000 sq ft
Baseboard	Hallway common bathrooms on all levels of the 1901 building	No	Good	200 ln ft
Transite Wall Panels	Exterior panels below roof line of 1901 building	No	Good	400 ln ft
Roofing Materials	1922 and 1947 building	No	Good	18,000 sq ft

¹ Condition: Based on EWI's visual assessment, good=no damage/very limited damage, Damaged=less than 10% localized or distributed damage, Significantly damaged=more than 10% damaged.

² Note: Approximate quantities were determined based on visual estimates made during the inspection and are subject to any limitations of this inspection or approved scope of work. It is possible that ACMs may be concealed in areas inaccessible to EWI during this inspection.

- Pipe and floor insulation is considered friable ACM, which can be crumbled, pulverized, or reduced to powder by hand pressure.
- Floor tile, baseboard and mastics are considered NESHAP Category I Non-Friable ACM. Category I Non-Friable ACM includes non-friable materials that will be or have been subject to sanding, grinding, cutting, or abrading.
- Exterior transite panels and roofing materials are considered NESHAP Category II Non-Friable ACM in their intact condition. Category II Non-Friable ACM includes non-friable materials with a high probability of becoming crumbled, pulverized, or powdered during renovation or demolition. Under disturbances by renovation/demolition activities, these materials could be considered friable.

The following materials were identified as <1% asbestos containing (does not meet the definition of ACM under US EPA NESHAP, but regulated by OSHA):

- The drywall joint compound and window caulk was determined to be <1% chrysotile is considered friable and was observed in good condition.
- The window caulk was determined to be <1% asbestos containing is considered nonfriable and was observed in good condition.

Based on the findings of this Asbestos Inspection, EWI recommends the following actions be taken with regard to ACM at the Site:

EWI recommends the removal or repair of damaged ACMs to prevent further damage and exposure to asbestos containing fibers. EWI recommends the removal of ACMs that may be disturbed during future construction, renovation, and/or demolition activities in accordance with EPA, OSHA, State of Illinois, and local regulatory requirements.

Per the IDPH asbestos regulations, if the amount of RACM to be removed equals or exceeds the threshold quantities (i.e. 160 square feet, 260 linear feet, or 35 cubic feet), the RACM must be removed by a IDPH-licensed asbestos abatement contractor.

The owner/operator must provide a written notification of planned activities to the IDPH Asbestos Section at least 10 working days before the renovation, demolition, or abatement project is scheduled to start.

Building materials containing <1% asbestos do not meet the definition of ACM under US EPA NESHAP; however, are regulated by US OSHA. If building materials containing <1% asbestos are being disturbed, demolition contractors must follow OSHA worker safety rules. At a minimum, these contractors must notify and provide training to their employees about work practices, clean-up and disposal requirements.

ACMs that are to remain in the building should be maintained under a written Operations and Maintenance (O&M). The O&M should be implemented by suitably trained personnel, until renovation or demolition necessitates removal.

Potentially concealed suspect asbestos containing building materials discovered during maintenance, renovation, or demolition activities should be sampled and analyzed to confirm the presence of asbestos prior to the disturbing such materials. If future maintenance, renovation or demolition activities make previously noted inaccessible areas available for inspection, EWI recommends that a

thorough assessment of these spaces, including destructive testing, be conducted at that time to identify and confirm the presence or absence of asbestos.

The estimated cost for asbestos abatement is approximately \$350,000.00. Note: the cost estimate provided is approximate and should be verified by site walk and independent bids by an approved abatement company. This estimated cost includes coordination and management of abatement by an asbestos abatement contractor licensed in the State of Illinois and the following:

- Furnishing of materials, tools and performing of all labor.
- Applicable licenses, notification fees and permits.
- Work performed by properly trained personnel.
- Proper engineering control.
- Disposal fees for ACMs.

EWI recommends performing third party abatement oversight, visual clearance, and air clearance sampling for all asbestos abatement projects, as required within the IDPH Asbestos Program Regulations. The individual performing the final visual inspection is required to be a licensed IDPH inspector, and final air clearance sampling performed under the supervision of a IDPH Air Sampling Professional (ASP). Neither may not be contractually associated with the asbestos project contractor, and there may not be any common ownership or employment relationship between the person or entity carrying out the asbestos project and the person or entity conducting the final clearance or sampling and analysis operations. In addition, it is also recommended to perform third party asbestos abatement oversight to be a licensed IDPH Asbestos Abatement Contractor Supervisor.

The Contractor should conduct all workers personal monitoring during abatement required by OSHA for the ACM at the site, in which personal air monitoring will determine employee's exposure (outside the respirator) to airborne fibers. Representative daily personal monitoring during abatement projects are required by OSHA's Asbestos Standard (29 CFR 1926.1101). Data from personal air monitoring will be used to verify effectiveness of removal engineering techniques for achieving minimal employee exposure. An Air Sampling Technician under the direct supervision of the ASP can collect area air samples in accordance with the guidelines established in the NIOSH Method 7400, inside work areas during abatement, exhaust areas, transitional occupied areas etc. to verify the effectiveness of engineering controls implemented by the abatement contractor work areas. Final visual and air clearance sampling is required to be conducted by a third party to verify proper project completion. Clearance air samples following the EPA sampling protocols are collected and submitted to an AIHA Laboratory Accreditation Program laboratory certified for PCM clearance analysis.

5.2 Lead-Based Paint Survey

According to the US EPA and HUD, LBP is defined as XRF measurements greater than or equal to 1.0 mg/cm². Based on the XRF results, LBP was identified in the following locations:

- Interior 1901 buildings basement level northwest classroom south brick wall
- Interior 1901 buildings basement level southwest classroom north wood door casing
- Interior 1901 buildings basement level southeast storage south wall chair railing
- Interior 1901 buildings basement level east foyer north wood door casing
- Interior 1901 buildings basement level west foyer north window frame
- Interior 1901 buildings basement level west storage south wall chair railing
- Interior 1901 buildings basement level southwest storage east wood wall
- Interior 1901 buildings first level northeast classroom north plaster wall
- Interior 1901 buildings first level northeast coatroom west lower plaster wall
- Interior 1901 buildings first level Teachers workroom west plaster wall
- Interior 1901 buildings first level Teachers workrooms north windowsill
- Interior 1901 buildings first level northwest classroom north lower plaster wall
- Interior 1901 buildings first level southwest classroom south lower plaster wall
- Interior 1901 buildings first level southwest classroom south lower plaster wall
- Interior 1901 buildings first level southeast classroom north lower plaster wall
- Interior 1901 buildings first level southeast classroom plaster ceiling
- Interior 1901 buildings first level foyer south lower plaster wall
- Interior 1901 buildings second level east stairwell south lower plaster wall
- Interior 1901 buildings second level northwest classroom north lower plaster wall
- Interior 1901 buildings second level northwest classroom north upper plaster wall
- Interior 1901 buildings second level southwest classroom south lower plaster wall
- Interior 1901 buildings second level south center south lower plaster wall
- Interior 1901 buildings third level foyer ceiling steel beam
- Interior 1922 buildings gymnasium stage south storage center south plaster wall
- Interior 1922 buildings gymnasium north stage runway north plaster wall
- Interior 1922 buildings first level north center bathroom north ceramic tile wall
- Interior 1922 buildings first level northeast bathroom west ceramic tile wall
- Interior 1922 buildings second level west stairwell north plaster wall
- Interior 1922 buildings third level east hall south center classroom west plaster wall
- Interior 1949 buildings first level west center classroom north ceramic tile wall
- Interior 1949 buildings first level south hallway north ceramic tile wall

Peeling and flaking of LBP poses an inhalation and ingestion risk to building occupants and construction workers during renovation and demolition. US OSHA has General Industry (29 CFR 1910.1025) and Construction (29 CFR 1926.62) standards. LBP that will be disturbed as a result of renovation/demolition should be stabilized or abated to minimize exposures. Waste should be properly stored and disposed of according to US EPA and applicable Federal, state, and local regulations. EWI recommends the LBP in poor condition be stabilized or abated prior to renovation or demolition work and further that the work be performed by an IDPH-licensed abatement contractor. A composite sample should be collected of building materials that contain LBP in accordance with EPA Method SW-846, and a determination should be made whether the material exhibits the characteristic of toxicity for lead using the Toxicity Characteristic Leaching Procedure (TCLP) Test Method 1311. If the representative sample fails the TCLP test, the building materials with LBP must be disposed of as a hazardous waste during any demolition activities.

5.3 Waste Inventory

A waste inventory is provided in Section 5.0. Wastes identified included 1-gallon or less containers of mineral spirits, sealants, oil, and insecticides. White goods including air conditioner compressors, hot-water heater and electronic devices (television, computers) were observed in the building. White goods and electronic devices should be properly maintained and when not in use recycled or disposed of in accordance with regulations. Minimal quantities of chemical containers were identified during the Survey and included 'typical' household maintenance and cleaning chemicals. The contents identified appeared to be in good condition with no evidence of release. These materials should be used until spent, or disposed in accordance with applicable federal, state, and local regulations.

6.0 LIMITATIONS

6.1 ACM Survey Limitations

This assessment was conducted by an AHERA-Certified Asbestos Inspector. The conclusions presented in this report are based solely upon the reported analytical results from an independent laboratory. It is possible that ACMs may be concealed in wall cavities and other inaccessible areas. If these areas are exposed during construction, remodeling, or demolition, these areas should either be tested or treated as asbestos-containing.

A significant portion of the building's rooms were unable to be accessed due to safety concerns. On this basis, EWI's assumptions about positive materials should be considered across all sections of the building.

6.2 LBP Survey Limitations

This assessment was conducted by a Lead Inspector licensed in the state of Illinois. The conclusions presented in this report are based solely upon the reported analytical results from the XRF readings for LBP. It is possible that LBP may be concealed in wall cavities and other inaccessible areas. If these areas are exposed during construction, remodeling, or demolition, these areas shall either be tested or treated as lead-containing.

A significant portion of the building's rooms were unable to be accessed due to safety concerns. On this basis, EWI's assumptions about positive materials should be considered across all sections of the building.

This report was prepared based on interpretation of information obtained during the survey of the Site. The conclusions of this report are professional opinions based solely upon those visual site observations, information supplied by the client during the time of the Survey and interpretations of sample findings as described in our report. Locations where sampling was performed were described as approximate locations. The data collected during the limited inspection and short-term sample collection only allows us to determine if the results correspond to the characteristics of a building at the time of the survey. Our opinions and recommendations are intended exclusively for client use. Additionally, the opinions presented herein apply to the Site conditions existing at the time of our inspection. Therefore, our opinions may not apply to future conditions that may develop at the Site, which we have not had the opportunity to evaluate.

This assessment was performed at the request of Stantec utilizing methods and procedures consistent with good commercial or customary practices designed to conform with acceptable

industry standards and is not for use of other parties without the expressed written authorization of EWI. The independent conclusions represent Environmental Works, Inc.'s best professional judgment based on the conditions that existed and the information and data available to us during the course of this assignment. Factual information regarding operations, conditions, and test data provided to Reliant Parties, or their representative has been assumed to be correct and complete.

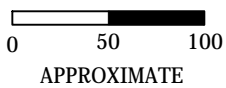


SOURCE: Google Earth (2016)

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A. BARCHAK

EWI# 220669
DRAWN BY: NML
April 4, 2022

SCALE (FEET)

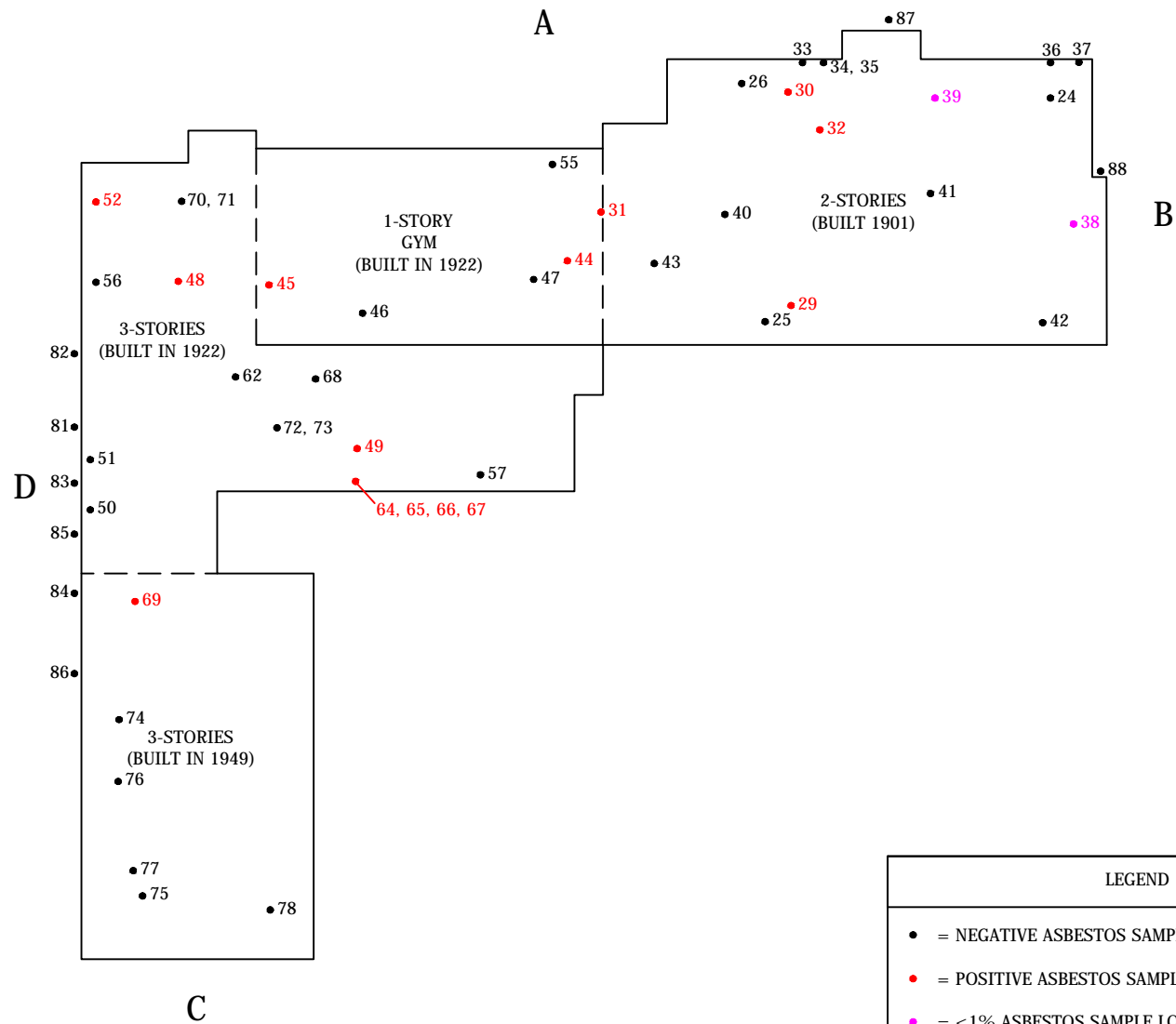


ENVIRONMENTAL WORKS
1731 Locust Street, Kansas City, MO 64108

SITE LOCATION MAP

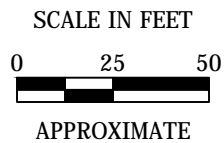
HARRISON SCHOOL
2702 W. KRAUSE AVENUE
PEORIA, ILLINOIS

FIGURE
1.0



CHECKED BY:
A. BARCHAK

EWI # 220669
DRAWN BY: NML
April 4, 2022

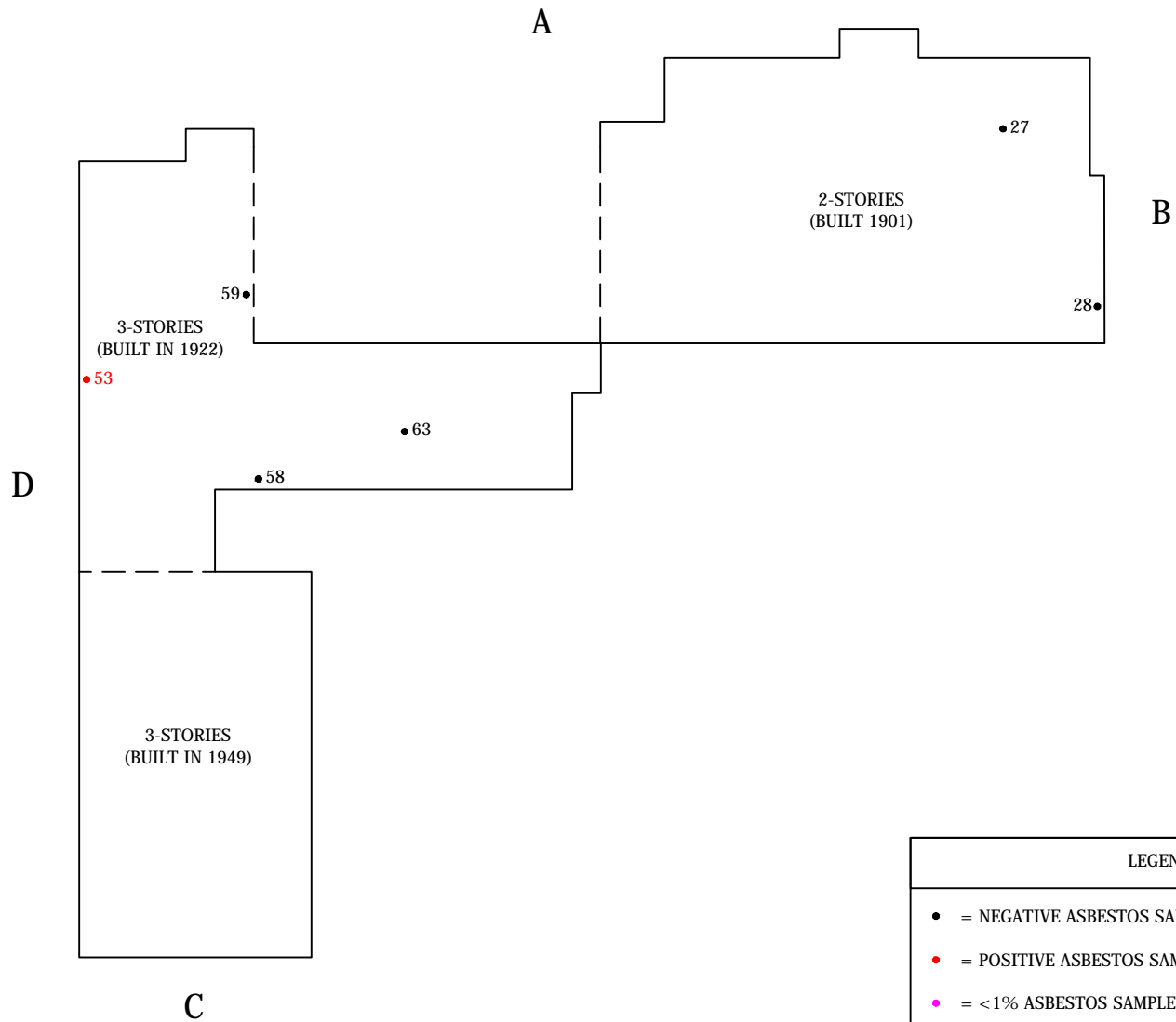


Kansas City Office Location:
1731 Locust Street
Kansas City, MO 64108
Phone: (816) 285-8410

SAMPLE LOCATIONS MAP

HARRISON SCHOOL - 1ST FLOOR
2702 W. KRAUSE AVENUE
PEORIA, ILLINOIS

FIGURE
2.0

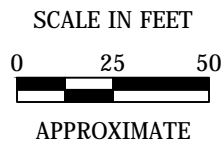


LEGEND	
•	= NEGATIVE ASBESTOS SAMPLE LOCATION
•	= POSITIVE ASBESTOS SAMPLE LOCATION
•	= <1% ASBESTOS SAMPLE LOCATION



CHECKED BY:
A. BARCHAK

E.W.I. # 220669
DRAWN BY: NML
Apr. 4, 2022



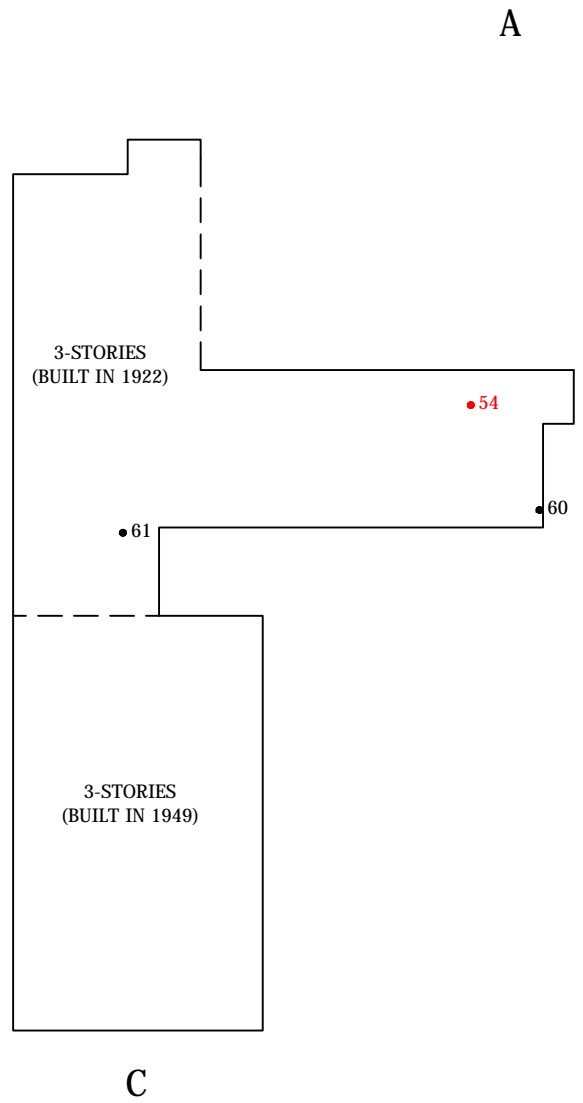
Kansas City Office Location:
1731 Locust Street
Kansas City, MO 64108
Phone: (816) 285-8410

SAMPLE LOCATIONS MAP

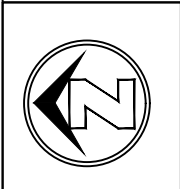
HARRISON SCHOOL - 2ND FLOOR
2702 W. KRAUSE AVENUE
PEORIA, ILLINOIS

FIGURE

2.1



LEGEND	
•	= NEGATIVE ASBESTOS SAMPLE LOCATION
•	= POSITIVE ASBESTOS SAMPLE LOCATION
•	= <1% ASBESTOS SAMPLE LOCATION



CHECKED BY:
A. BARCHAK

E.W.I. # 220669
DRAWN BY: NML
Apr. 4, 2022

SCALE IN FEET

0 25 50

APPROXIMATE

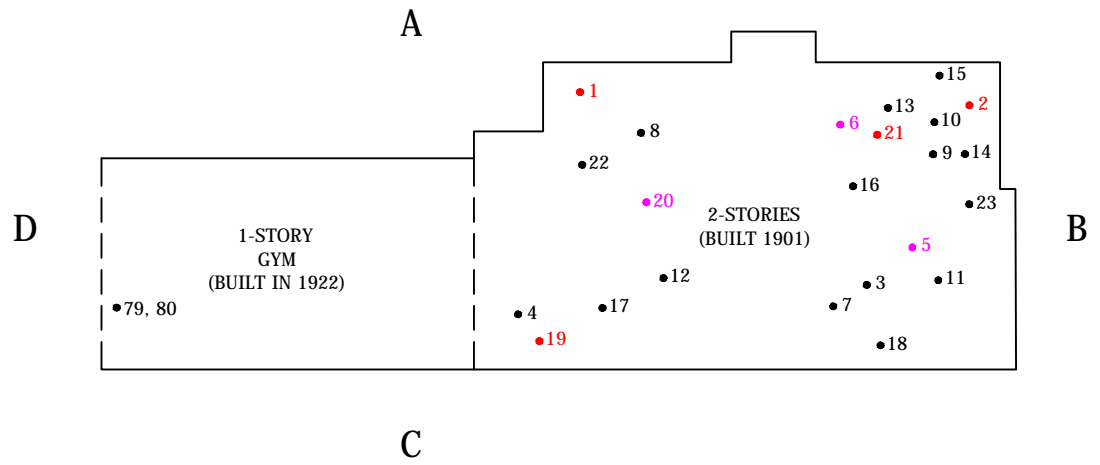


Kansas City Office Location:
1731 Locust Street
Kansas City, MO 64108
Phone: (816) 285-8410

SAMPLE LOCATIONS MAP

HARRISON SCHOOL - 3RD FLOOR
2702 W. KRAUSE AVENUE
PEORIA, ILLINOIS

FIGURE
2.2

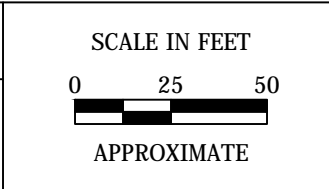


LEGEND
• = NEGATIVE ASBESTOS SAMPLE LOCATION
• = POSITIVE ASBESTOS SAMPLE LOCATION
• = <1% ASBESTOS SAMPLE LOCATION



CHECKED BY:
A. BARCHAK

EWI # 220669
DRAWN BY: NML
April 4, 2022



Kansas City Office Location:
1731 Locust Street
Kansas City, MO 64108
Phone: (816) 285-8410

SAMPLE LOCATIONS MAP

HARRISON SCHOOL - BASEMENT
2702 W. KRAUSE AVENUE
PEORIA, ILLINOIS

FIGURE
2.3

Table 1.0 Asbestos Sample Summary

Hazardous Materials Survey 2702 W Krause Ave Peoria, Illinois

Sample determined to contain >1% asbestos
 Sample determined to contain <1% asbestos
 ND = Non Detect, asbestos was not identified

Sample ID	Material	Sample Location	Analytical Results - Laboratory Description
1	White /Pink Floor Tile + Black Mastic	1901 Building, Basement, Floor, NW Classroom	5% Chrosotile - Off-White Floor Tile
			7% Chrysotile - Black Mastic
			5% Chrosotile - Brown Floor Tile
			7% Chrysotile - Black Mastic
2	White/Pink Floor Tile + Black Mastic	1901 Building, Basement, NE Classroom	5% Chrosotile - Off-White Floor Tile
			7% Chrysotile - Black Mastic
			5% Chrosotile - Brown Floor Tile
			7% Chrysotile - Black Mastic
3	Black Wall Mastic	1901 Building, Basement, Common Area Wall	ND- Gray Cementitious Material with Tan Paint
			ND- Black Mastic
4	Black Wall Mastic	1901 Building, Basement, Common Area Wall	ND- Gray Cementitious Material with Tan Paint
			ND- Black Mastic
5	Window Glazing	1901 Building, Basement, Common Area Window	<1% Chrysotile - Gray Window Glazing
6	Window Glazing		<1% Chrysotile - Gray Window Glazing
7	Cove Base + Mastic	1901 Building, Basement, SE Bathroom	ND - Black Baseboard
			ND - Brown Mastic with Multilayered Paint
8	Cove Base + Mastic	1901 Building, Basement, NE Classroom	ND - Black Baseboard
			ND - Brown Mastic with Multilayered Paint
9	Acoustic Ceiling Tile (1)	1901 Building, Basement, NE Classroom	ND - Gray Ceiling Tile with White Surface
10	Acoustic Ceiling Tile (1)	1901 Building, Basement, NE Classroom	ND - Gray Ceiling Tile with White Surface
11	White Plaster	1901 Building, Basement, Common Area Wall	ND - White Skim Coat with Multilayered Paint
			ND - Off-White Base Coat
12	White Plaster	1901 Building, Basement, Common Area Wall	ND - White Skim Coat with Multilayered Paint
			ND - Off-White Base Coat
13	White Plaster	1901 Building, Basement, Common Area Wall	ND - White Skim Coat with Multilayered Paint
			ND - Off-White Base Coat
14	Acoustic Ceiling Tile-1 (1x1) + Glue Dots	1901 Building, Basement, NE Classroom	ND - Off-White Ceiling Tile with White Surface
			ND - Brown Glue
			ND - White Compound with Multilayered Paint
			ND - Off-White Ceiling Tile with White Surface
15	Acoustic Ceiling Tile-1 (1x1) + Glue Dots	1901 Building, Basement, NE Classroom	ND - Brown Glue
			ND- White Compound with Multilayered Paint
			ND - White Compound with Multilayered Paint
16	TSI Pipe Wrap	1901 Building, Basement, Common Area Wall	ND- White Wrap with Multilayered Paint
			ND - Brown Insulation
17	TSI Pipe Wrap	1901 Building, Basement, Common Area Wall	ND- White Wrap with Multilayered Paint
			ND - Brown Insulation
18	TSI Pipe Wrap	1901 Building, Basement, Common Area Wall	ND - Brown Insulation
19	TSI AirOCeIl Wrap	1901 Building, Basement, Floor Common Area	ND- White Wrap with White Paint
			70% Chrysotile - Brown/White Insulation
20	TSI AirOCeIl Wrap	1901 Building, Basement, Ceiling, SW Classroom	ND- White Wrap with White Paint
			<1% Amosite - Gray/White Insulation
21	TSI AirOCeIl Wrap	1901 Building, Basement, Floor, NE Classroom	ND- White Wrap with White Paint
			70% Chrysotile - Brown/White Insulation
22	Plaster + Skim Coat	1901 Building, Basement, NW Classroom	ND - White Skim Coat with Beige Paint
			ND - Gray Plaster with Multilayered Paint
23	Plaster + Skim Coat	1901 Building, Basement, Staircase	ND - White Skim Coat with Multilayered Paint
			ND - Gray Base Coat
24	Plaster + Skim Coat	1901 Building, 1st Level, NE Classroom	ND - White Skim Coat with Multilayered Paint
			ND - Gray Base Coat

Table 1.0 Asbestos Sample Summary

Hazardous Materials Survey 2702 W Krause Ave Peoria, Illinois

Sample determined to contain >1% asbestos
 Sample determined to contain <1% asbestos
 ND = Non Detect, asbestos was not identified

Sample ID	Material	Sample Location	Analytical Results - Laboratory Description
25	Plaster + Skim Coat	1901 Building, 1st Level, NW Classroom	ND - White Compound with White Paint
			ND - White Skim Coat with Multilayered Paint
			ND - Gray Base Coat
26	Plaster + Skim Coat	1901 Building, 1st Level, SW Classroom	ND - White Skim Coat with Multilayered Paint
			ND - Gray Base Coat
27	Plaster + Skim Coat	1901 Building, 2nd Level, Common Area	ND - White Skim Coat with Multilayered Paint
			ND - Gray Base Coat
28	Plaster + Skim Coat	1901 Building, 2nd Level, SW Classroom	ND - White Compound and White Paint
			ND - White Skim Coat with Multilayered Paint
			ND - Gray Base Coat
29	Floor Felt + White Paper	1901 Building, 1st Floor, Floor, SW Classroom	ND - Brown Felt
			80% Chrysotile - White Paper
30	Floor Felt + White Paper	1901 Building, 1st Floor, Floor, SW Classroom	ND - Brown Felt
			80% Chrysotile - White Paper
31	Floor Felt + White Paper	1901 Building, 1st Floor, Floor, W Exit Stairs	ND - Brown Felt
			80% Chrysotile - White Paper
32	White Floor Tile + Mastic	1901 Building, 1st Floor, Floor, NW Classroom	ND - Yellow Mastic
			5% Chrysotile - Off-White Floor Tile
			ND - Brown Mastic
33	White Floor Tile + Mastic	1901 Building, 1st Floor, Floor, NW Classroom	ND - White Floor Tile
			ND - Brown Mastic
34	White Sheet Flooring	1901 Building, 1st Floor, Floor, NW Classroom	ND - Beige Sheet Flooring with Fibrous Backing
			ND - Yellow Mastic
35	White Sheet Flooring	1901 Building, 1st Floor, Floor, NW Classroom	ND - Beige Sheet Flooring with Fibrous Backing
			ND - Yellow Mastic
36	Green Chalk + Mastic + Paper	1901 Building, 1st Level, NE Classroom	ND - Tan Mastic
			ND - Green Non-Fibrous Material (Chalk)
			ND - Brown Paper
37	Green Chalk + Mastic + Paper	1901 Building, 1st Level, NE Classroom	ND - Tan Mastic
			ND - Green Non-Fibrous Material (Chalk)
			ND - Tan Mastic
38	Drywall Composite-1 (drywall/tape/joint compound)	1901 Building, 1st Floor, Floor, Common Area Wall	<1% Chrysotile - White Compound with Multilayered Paint
			ND - Cream Tape
			<1% Chrysotile - White Joint Compound
39	Drywall Composite-1 (drywall/tape/joint compound)	1901 Building, 1st Floor, Floor, Common Area Wall	ND - White Drywall with Brown Paper
			<1% Chrysotile - White Compound with Multilayered Paint
			ND - Cream Tape
40	Ceiling Drywall	1901 Building, Auditorium, Open Area	<1% Chrysotile - White Joint Compound
			ND - White Drywall with Brown Paper
41	Ceiling Drywall	1901 Building, Auditorium, Open Area	ND - White Drywall with Brown Paper
			ND - White Drywall with Brown Paper
42	Roofing Materials	1901 Building, Auditorium, Open Area	ND - Black Roofing Shingle with Multicolored Pebbles
			ND - Black Roofing Tar and Felt
			ND - Black Roofing Shingle with Multicolored Pebbles
			ND - Black Roofing Tar and Felt
43	Roofing Materials	1901 Building, Auditorium, Open Area	ND - Black Roofing Shingle with Multicolored Pebbles
			ND - Black Roofing Tar and Felt
			ND - Black Roofing Shingle with Multicolored Pebbles
			ND - Black Roofing Tar

Table 1.0 Asbestos Sample Summary

Hazardous Materials Survey 2702 W Krause Ave Peoria, Illinois

Sample determined to contain >1% asbestos
 Sample determined to contain <1% asbestos
 ND = Non Detect, asbestos was not identified

Sample ID	Material	Sample Location	Analytical Results - Laboratory Description
44	Grey Floor Tile + Mastic	1922, Gymnasium, Floor	5% Chrysotile - Gray Floor Tile 7% Chrysotile - Black Mastic
45	Grey Floor Tile + Mastic	1922, Gymnasium, Floor	5% Chrysotile - Gray Floor Tile 7% Chrysotile - Black Mastic
46	Acoustic Ceiling Tile-2 (1x1) + Brown Glue Dots	1922, Gymnasium, Ceiling	ND - White Ceiling Tile with White Surface ND - Brown Glue ND - Tan Glue
47	Acoustic Ceiling Tile-2 (1x1) + Brown Glue Dots	1922, Gymnasium, Ceiling	ND - White Ceiling Tile with White Surface ND - Brown Glue ND - Tan Glue
48	Green Floor Tile + Mastic	1922, Gymnasium, Hallway Floor	5% Chrsotile - Gray Floor Tile 7% Chrsotile - Black Mastic
49	Green Floor Tile + Mastic	1922, Gymnasium, Hallway Floor	5% Chrsotile - Gray Floor Tile 7% Chrsotile - Black Mastic
50	Drywall Composite-2 (drywall/tape/joint compound)	1922, 1st Level, SW Classrooms	ND - White Compound with Tan Paint ND - Cream Tape ND - White Joint Compound ND - White Drywall with Brown Paper
51	Drywall Composite-2 (drywall/tape/joint compound)	1922, 1st Level, SW Classrooms	ND - White Compound with Tan Paint ND - Cream Tape ND - White Joint Compound ND - White Drywall with Brown Paper
52	TSI AirOCeIl Wrap	1922 Building, 1st Floor, Ceiling, NW Classroom	ND - Cream Woven Material 80% Chrysotile - Off-White Wrap
53	TSI AirOCeIl Wrap	1922 Building, 2nd Floor, Floor, W Classroom	80% Chrysotile - Off-White Wrap ND - Pink Insulation
54	TSI AirOCeIl Wrap	1922 Building, 3rd Floor, Floor, NE Hallway	ND - Cream Woven Material with Multicolored Paint 80% Chrysotile - Off-White Wrap
55	Plaster + Skim Coat (2)	1922, Gymnasium, Wall	ND - White Plaster With Multicolored Paint ND - Off-White Plaster
56	Plaster + Skim Coat (2)	1922 Building, 1st Floor, Wall, NW Classroom	ND - White Plaster ND - Off-White Plaster
57	Plaster + Skim Coat (2)	1922 Building, 1st Floor, Wall, SE Classroom	ND - White Plaster ND - Off-White Plaster
58	Plaster + Skim Coat (2)	1922 Building, 2nd Floor, Wall, N Classroom	ND - White Plaster ND - Off-White Plaster
59	Plaster + Skim Coat (2)	1922 Building, 2nd Floor, Wall, N Hall	ND - White Plaster with Cream Paint ND - Off-White Plaster
60	Plaster + Skim Coat (2)	1922 Building, 3rd Floor, Wall, E Hall	ND - White Plaster With Multicolored Paint ND - Off-White Plaster
61	Plaster + Skim Coat (2)	1922 Building, 3rd Floor, Wall, S Hall	ND - White Plaster With Multicolored Paint ND - Off-White Plaster
62	Door Window Glazing	1922 Building, 1st Floor, Hall	ND - White Window Glazing
63	Door Window Glazing	1922 Building, 2nd Floor, Hall	ND - White Window Glazing
64	Cove Base + Mastic	1922 Building, 1st Floor, Wall, Bathroom	8% Chrysotile - Black Baseboard Tile 10% Chrsotile - Black Mastic
65	Cove Base + Mastic	1922 Building, 1st Floor, Wall, Bathroom	8% Chrysotile - Black Baseboard Tile 10% Chrsotile - Black Mastic
66	White Floor Tile + Mastic	1922 Building, 1st Floor, Floor, Bathroom	ND - Cream Non-Fibrous Material 6% Chrysotile - White Floor Tile ND - Black Mastic

Table 1.0 Asbestos Sample Summary

Hazardous Materials Survey 2702 W Krause Ave Peoria, Illinois

Sample determined to contain >1% asbestos
 Sample determined to contain <1% asbestos
 ND = Non Detect, asbestos was not identified

Sample ID	Material	Sample Location	Analytical Results - Laboratory Description
67	White Floor Tile + Mastic	1922 Building, 1st Floor, Floor, Bathroom	ND - Cream Non-Fibrous Material
			6% Chrysotile - White Floor Tile
68	Red Floor Tile + Black Mastic	1922 Building, 2nd Floor, Hallway	ND - Black Mastic
			ND - Red Floor Tile
69	Red Floor Tile + Black Mastic	1922 Building, 2nd Floor, Floor, Hallway	6% Chrysotile - Orange Floor Tile
			8% Chrysotile - Black Mastic
70	White Floor Tile (12) + Black Mastic	1922 Building, 3rd Floor, Floor, Hallway	ND - White Floor Tile
			ND - Yellow Mastic
71	White Floor Tile (12) + Black Mastic	1922 Building, 3rd Floor, Floor, Hallway	ND - Black Mastic
			ND - Yellow Mastic
72	Acoustic Ceiling Tile (2)	1922 Building, 3rd Floor, Ceiling, Hallway	ND - Gray Acoustic Ceiling Tile with White Surface
73	Acoustic Ceiling Tile (2)	1922 Building, 3rd Floor, Ceiling, Hallway	ND - Gray Acoustic Ceiling Tile with White Surface
74	Acoustic Ceiling Tile-3 (1x1) + Brown Glue Dots	1949 Building, 1st Floor, Ceiling, Hallway	ND - White Acoustic Ceiling Tile with White Paint
			ND - Brown Mastic
75	Acoustic Ceiling Tile-3 (1x1) + Brown Glue Dots	1949 Building, 1st Floor, Ceiling, Hallway	ND - White Acoustic Ceiling Tile with White Paint
			ND - Brown Mastic
76	Plaster + Skim Coat (3)	1949 Building, 1st Floor, Walls, Hallway	ND - White Plaster with Cream Paint
			ND - Beige Plaster
77	Plaster + Skim Coat (3)	1949 Building, 1st Floor, Walls, Hallway	ND - White Plaster with Cream Paint
			ND - Beige Plaster
78	Plaster + Skim Coat (3)	1949 Building, 1st Floor, Walls, Hallway	ND - White Plaster with Cream Paint
			ND - Beige Plaster
79	Roof Edge (Gym)	1922 Gynasium, Roof	ND - Black Roofing Material with Silver Paint
			ND - Black Roofing Tar
80	Roof Deck (Gym)	1922 Gynasium, Roof	ND - Black Roofing Material with Silver Paint
			ND - Black Roofing Tar
81	Door Caulk (1)	Exterior, Door, West Side	ND - Off-White Caulk
82	Door Caulk (1)	Exterior, Door, West Side	ND - Off-White Caulk
83	Window Caulk (1)	Exterior, Window, West Side	ND - Light Gray Caulk
84	Window Caulk (1)	Exterior, Window, West Side	ND - Light Gray Caulk
85	Window Caulk (2)	Exterior, Window, West Side	ND - Red Caulk
86	Window Caulk (2)	Exterior, Window, West Side	ND - Red Caulk
87	Door Caulk (2)	Exterior, Door, North Side	ND - Off-White Caulk with Multilayered Paint
88	Door Caulk (2)	Exterior, Door, East Side	ND - Off-White Caulk with Multilayered Paint

Table 2.0
Lead-Based Paint Survey Record Sheet with XRF Results

Hazardous Materials Survey
Former Harrison School Building
2702 W Krause Avenue
Peoria, Illinois

Greater than or equal to 1.0 mg/cm ² - Considered Lead-Based Paint								
Inspector: Matt Honerkamp								
Inspection Date: 3/09/2022								
Number	Building	Room	Component	Side	Substrate	Color	Condition	Reading
105		Calibration						1.0
106	HS1901-B	East Stairwell	Upper Paint	B	Plaster	Beige	D	0.4
107	HS1901-B	East Stairwell	Lower Paint	B	Plaster	Brown	D	0.3
108	HS1901-B	East Stairwell	Chair Rail	B	Wood	Brown	D	0.0
109	HS1901-B	East Stairwell	Post	B	Wood	Brown	D	0.0
110	HS1901-B	East Stairwell	Window Frame	B	Wood	Brown	D	0.1
111	HS1901-B	Northeast Corner	Wall	A	Plaster	Beige	D	0.3
112	HS1901-B	Northeast Corner	Door Surface	A	Wood	Brown	D	0.0
113	HS1901-B	North West Corner	Floor	N/A	Concrete	Gray	D	0.3
114	HS1901-B	Northwest Corner	Wall	C	Brick	Beige	D	10.7
115	HS1901-B	Southwest Room	Wall	D	Plaster	White	D	0.0
116	HS1901-B	Southwest Room	Door Casing	A	Wood	Brown	D	20.1
117	HS1901-B	Southeast Bathroom	Wall	C	Plaster	Blue	D	0.2
118	HS1901-B	Southeast Bathroom	Wall	A	Brick	Beige	D	0.1
119	HS1901-B	Southeast Storage	Chair Rail	C	Wood	Brown	D	8.8
120	HS1901-B	Southeast Storage	Upper Wall	C	Plaster	Beige	D	0.3
121	HS1901-B	Southeast Storage	Lower Wall	C	Plaster	Brown	D	0.4
122	HS1901-B	East Foyer	Wall	A	Plaster	Beige	D	0.3
123	HS1901-B	East Foyer	Door Casing	A	Wood	Brown	D	9.7
124	HS1901-B	East Foyer	Ceiling	N/A	Plaster	Beige	D	0.4
125	HS1901-B	West Foyer	Window Frame	A	Wood	Brown	D	15.6
126	HS1901-B	West Foyer	Wall	A	Plaster	Beige	D	0.0
127	HS1901-B	West Side Northwest Room	Wall	C	Brick	Beige	D	0.2
128	HS1901-B	West Side Northwest Room	Wall	C	Brick	Gray	D	0.0
129	HS1901-B	West Side Kitchen	Wall	C	Plaster	Beige	D	0.5
130	HS1901-B	West Side Storage	Chair Rail	C	Wood	Beige	D	9.2
131	HS1901-B	West Side Storage	Wall	C	Plaster	Beige	D	0.2
132	HS1901-B	West Side Bathroom	Wall	C	Plaster	Gray	D	0.7
133	HS1901-B	West Side Bathroom	Wall	C	Black	White	D	0.0
134	HS1901-B	West Side South Storage	Wall	B	Wood	Green	D	15.0
135	HS1901-1	Northeast Corner Classroom	Wall	A	Plaster	Beige	D	1.3
136	HS1901-1	Northeast Corner Classroom	Pipe Chase Wall	D	Plaster	Gray	D	0.1
137	HS1901-1	Northeast Corner Classroom	Floor	N/A	Wood	Stained	D	0.0
138	HS1901-1	Northeast Corner Classroom	Door Casing	C	Wood	Stained	D	0.0
139	HS1901-1	Northeast Corner Coat Room	Wall	D	Plaster	Beige	D	14.0
140	HS1901-1	Teachers Workroom	Upper Wall	D	Plaster	Beige	D	0.7
141	HS1901-1	Teachers Workroom	Lower Wall	D	Plaster	Beige	D	15.3
142	HS1901-1	Teachers Workroom	Window Sill	A	Wood	Yellow	D	37
143	HS1901-1	Northwest Room	Wall	D	Plaster	Green	D	0.7
144	HS1901-1	Northwest Room	Baseboard	D	Wood	Brown	D	0.0
145	HS1901-1	Northwest Classroom	U-Wall	A	Plaster	Beige	D	0.9
146	HS1901-1	Northwest Classroom	L-Wall	A	Plaster	Beige	D	15.1
147	HS1901-1	Northwest Classroom	Wall Frame	B	Wood	Beige	D	0.0
148	HS1901-1	Northwest Classroom	Baseboard	C	Wood	Brown	D	0.5
149	HS1901-1	Southwest Classroom	U-Wall	C	Plaster	Beige	D	0.3
150	HS1901-1	Southwest Classroom	L-Wall	C	Plaster	Beige	D	15.2
151	HS1901-1	South Center Classroom	U-Wall	C	Plaster	Beige	D	0.5
152	HS1901-1	South Corner Classroom	L-Wall	C	Plaster	Beige	D	17.0
153	HS1901-1	Southeast Classroom	U-Wall	C	Plaster	Beige	D	0.9
154	HS1901-1	Southeast Classroom	L-Wall	A	Plaster	Beige	D	14.4
155	HS1901-1	Southeast Classroom	Door Casing	A	Wood	Stained	D	0.0
156	HS1901-1	Southeast Classroom	Ceiling	N/A	Plaster	Beige	D	1.7
157	HS1901-1	Southeast Classroom	Chair Rail	A	Wood	Stained	D	0.0
158	HS1901-1	Foyer	U-Wall	341C	Plaster	Beige	D	0.5

Number	Building	Room	Component	Side	Substrate	Color	Condition	Reading
159	HS1901-1	Foyer	L-Wall	C	Plaster	Beige	D	14.4
160	HS1901-1	Foyer	Floor Casing	A	Wood	Black	D	0.1
161	HS1901-1	Foyer	Door Surface	A	Wood	Stained	D	0.0
162	HS1901-1	Foyer	Ceiling	N/A	Plaster	Beige	D	0.2
163	HS1901-1	Foyer	Transom Frame	C	Wood	Beige	D	0.0
164	HS1901-2	East Stairwell	U-Wall	C	Plaster	Beige	D	0.2
165	HS1901-2	East Stairwell	L-Wall	C	Plaster	Beige	D	17.3
166	HS1901-2	Northeast Classroom	U-Wall	B	Plaster	Beige	D	0.2
167	HS1901-2	Northeast Classroom	L-Wall	B	Plaster	Beige	D	0.0
168	HS1901-2	Northeast Classroom	Door Casing	C	Wood	Stained	D	0.0
169	HS1901-2	North Stairwell Room	Window Frame	A	Wood	Brown	D	0.0
170	HS1901-2	North Stairwell Room	Wall	A	Plaster	Beige	D	0.5
171	HS1901-2	North Stairwell	Wall	C	Plaster	Blue	D	0.1
172	HS1901-2	North Stairwell	Post	B	Wood	Stained	D	0.0
173	HS1901-2	Northwest Classroom	U-Wall	A	Plaster	Beige	D	1.4
174	HS1901-2	Northwest Classroom	L-Wall	A	Plaster	Beige	D	14.3
175	HS1901-2	Northwest Classroom Closet	Wall	B	Plaster	White	D	0.4
176	HS1901-2	Southwest Classroom	L-Wall	C	Plaster	Beige	D	14.3
177	HS1901-2	South Center Classroom	U-Wall	C	Plaster	Beige	D	0.0
178	HS1901-2	South Center Classroom	L-Wall	C	Plaster	Beige	D	12.4
179	HS1901-2	South Center Classroom	Door Casing	B	Wood	Brown	D	0.0
180	HS1901-2	Foyer	U-Wall	A	Plaster	Beige	D	0.2
181	HS1901-2	Foyer	L-Wall	A	Plaster	Beige	D	17.3
182	HS1901-2	Foyer	Chair Rail	A	Wood	Stained	D	0.1
183	HS1901-2	Northwest Classroom	Ceiling	N/A	Plaster	White	D	0.5
184	HS1901-2	South Center Classroom	Ceiling	N/A	Plaster	White	D	0.5
185	HS1901-3	Foyer	Wall	D	Plaster	Green	D	0.6
186	HS1901-3	Foyer	Wall	B	Plaster	Green	D	0.8
187	HS1901-3	Foyer	I-Beam	N/A	Steel	Gray	D	5.3
188	HS1922-G	Stage	Floor Tile	N/A	Vinyl	Gray	D	0.3
189	HS1922-G	Gymnasium	L-Wall	A	Brick	Brown	D	0.2
190	HS1922-G	Gymnasium	Trim	A	Wood	Beige	D	0.0
191	HS1922-G	Gymnasium	U-Wall	A	Block	Beige	D	0.1
192	HS1922-G	Gymnasium	L-Wall	C	Brick	Brown	D	0.0
193	HS1922-G	Gymnasium	U-Wall	C	Plaster	Beige	D	0.3
194	HS1922-G	Gymnasium	Ceiling	N/A	Plaster	Beige	D	0.2
195	HS1922-G	Stage	Archway Base	C	Plaster	Brown	D	0.2
196	HS1922-G	Stage South Storage	Wall	C	Plaster	Beige	D	2.3
197	HS1922-G	North Stage Runway	Wall	A	Plaster	Brown	D	2.3
198	HS1922-1	West Stairwell Area	Wall	D	Plaster	Beige	D	0.6
199	HS1922-1	Northwest Room	Wall	D	Drywall	White	D	0.0
200	HS1922-1	North Center Bathroom	Wall	A	Ceramic	Green	D	4.5
201	HS1922-1	North Center Bathroom	Partition Wall	D	Metal	Brown	D	0.9
202	HS1922-1	East Hallway	Wall	A	Plaster	Beige	D	0.5
203	HS1922-1	Northeast Bathroom	Wall	D	Ceramic	Green	D	3.3
204	HS1922-2	West Stairwell	Wall	A	Plaster	Brown	D	2.0
205	HS1922-2	West Center Room	Wall	D	Plaster	Green	D	0.6
206	HS1922-2	South Center Room	Wall	C	Plaster	Beige	D	0.2
207	HS1922-2	East Hall Southwest Classroom	Trim	A	Wood	Green	D	0.1
208	HS1922-2	East Hall South Center Classroo	Wall	C	Plaster	Beige	D	0.1
209	HS1922-2	East Hall South Center Classroo	Door Surface	C	Wood	White	D	0.1
210	HS1922-2	East Hall	Wall	D	Plaster	Beige	D	0.8
211	HS1922-2	East Hall Gym	Archway	D	Plaster	White	D	0.2
212	HS1922-3	Northwest Stairwell	Wall	D	Plaster	Beige	D	0.5
213	HS1922-3	Northwest Bathroom	Wall	D	Plaster	Beige	D	0.0
214	HS1922-3	Northwest Bathroom	Stall Wall	D	Wood	Brown	D	0.5
215	HS1922-3	Northwest Bathroom	Wall	B	Plaster	White	D	0.2

Number	Building	Room	Component	Side	Substrate	Color	Condition	Reading
216	HS1922-3	East Hall Southwest Classroom	Wall	B	Plaster	Beige	D	0.3
217	HS1922-3	East Hall South Center Classroo	Wall	D	Plaster	Red	D	2.2
218	HS1922-3	East Hall	Wall	C	Plaster	Beige	D	0.5
219	HS1922-3	East Hall Closet	Door Casing	C	Wood	Beige	D	0.0
220	HS1922-3	Room 302	Door Surface	D	Wood	Brown	D	0.0
221	HS1922-3	South Hallway	U-Wall	B	Plaster	Beige	D	0.2
222	HS1922-3	South Hallway	L-Wall	B	Plaster	Brown	D	0.0
223	HS1922-3	Northwest Stairwell	Handrail	A	Wood	Black	D	0.0
224	HS1922-3	Northwest Stairwell	Rail Cap	A	Wood	Black	D	0.0
225	HS1949-1	West Center Classroom	Wall	A	Plaster	Beige	D	0.2
226	HS1949-1	West Center Classroom	Wall	D	Plaster	Beige	D	0.3
227	HS1949-1	West Center Classroom	Wall	A	Ceramic	Beige	D	2.9
228	HS1949-1	Southwest Classroom	Wall	D	Plaster	Beige	D	0.3
229	HS1949-1	Southwest Classroom	Wall Closet	B	Plaster	Green	D	0.3
230	HS1949-1	South Hallway	Door Surface	C	Wood	Brown	D	0.1
231	HS1949-1	South Hallway	Door Casing	C	Wood	Black	D	0.2
232	HS1949-1	South Hallway	Wall	A	Ceramic	Beige	D	3.2
233	HS1949-1	South Hallway	Wall	A	Block	Beige	D	0.1
234	HS1949-1	South Hallway	Wall	B	Plaster	Beige	D	0.0
235	HS1949-1	South Hallway	Ceiling	N/A	Plaster	Beige	D	0.2
236	HS1949-1	South Utility Room	Wall	B	Plaster	Gray	D	0.3
237		Calibration						1.1

APPENDIX A
Inspector Certifications



ASBESTOS
PROFESSIONAL
LICENSE

ID NUMBER
100 - 20407

ISSUED
4/20/2021

EXPIRES
05/15/2022

ANDREW J BARCHAK
2609 NE HORSESHOE DRIVE
LEES SUMMIT, MO 64086

Environmental Health





525-535 West Jefferson Street • Springfield, Illinois

12/15/20:

LICENSE NUMBER: 009425

Matt G Honerkamp
145 Carnoustie Ct
St. Charles, MO 63301



**LEAD RISK
ASSESSOR LICENSE**

LEAD ID	ISSUED	EXPIRES
009425	12/15/2021	1/31/2023

Matt G Honerkamp
145 Carnoustie Ct
St. Charles, MO 63301



ILLINOIS LEAD PROGRAM
Environmental Health

LICENSE APPROVED

IDPH recently received and reviewed your application for lead licensure. Your qualifications have been reviewed and found that you meet the requirements set forth by the Lead Poisoning Prevention Code, Section 845.125. Therefore, your application for lead licensure is now complete. Enclosed please find your lead license card. Please have this identification card with you at all times while conducting lead abatement activities.

IDPH has updated its 7 – Day Notice of Commencement effective immediately. The revised document can be identified by its 9/16 revision date on the bottom left corner. Please discontinue using the old form and begin using the new form as soon as possible. The revised form is located in the same web address that the old form was located (<http://www.dph.illinois.gov/sites/default/files/forms/7-day-notice-leadabatement-mitigation-project-091916.pdf>).

United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 500031-0

Eurofins EMLab P&K

Phoenix, AZ

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:*

Asbestos Fiber Analysis

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality
management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).*

2022-01-01 through 2022-12-31

Effective Dates



A handwritten signature in blue ink, reading "Dana S. Laman".

For the National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Eurofins EMLab P&K
1501 W. Knudsen Dr.
Phoenix, AZ 85027-1307
Mr. Dan Shelby
Phone: 623-298-1015
Email: dan.shelby@eurofinset.com
<http://www.emlab.com>

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 500031-0

Bulk Asbestos Analysis

Code

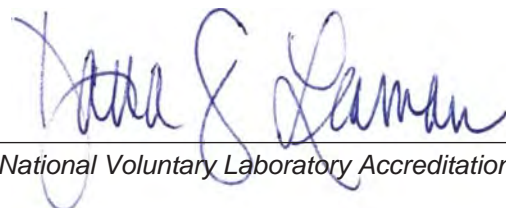
Description

18/A01

EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples

18/A03

EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials



For the National Voluntary Laboratory Accreditation Program

APPENDIX B

Photographic Documentation

APPENDIX C

Laboratory Analytical Results and Chain of Custody

Report for:

Mr Andrew Barchak, Nicole Lounsberry, Gracie Tiffany
Environmental Works
1731 Locust Street
Kansas City, MO 64108

Regarding: Project: 220669; ACM Inspection - 2702 W Krause Ave, Peoria, Illinois
EML ID: 2874509

Approved by:

Dates of Analysis:

Asbestos PLM: 03-19-2022 and 03-21-2022



Approved Signatory
Renee Luna-Trepczynski

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267)
NVLAP Lab Code 500031-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Client: Environmental Works
 C/O: Mr Andrew Barchak, Nicole Lounsberry,
 Gracie Tiffany
 Re: 220669; ACM Inspection - 2702 W Krause Ave,
 Peoria, Illinois

Eurofins EMLab P&K
 1501 West Knudsen Drive, Phoenix, AZ 85027
 (800) 651-4802 Fax (623) 780-7695 www.emlab.com
 Date of Sampling: 03-09-2022
 Date of Receipt: 03-16-2022
 Date of Report: 03-21-2022

ASBESTOS PLM REPORT

Total Samples Submitted: 88
Total Samples Analyzed: 88
Total Samples with Layer Asbestos Content > 1%: 20

Location: 1, White/Pink Floor Tile + Black Mastic

Lab ID-Version‡: 13784092-1

Sample Layers	Asbestos Content
Off-White Floor Tile	5% Chrysotile
Black Mastic	7% Chrysotile
Brown Floor Tile	5% Chrysotile
Black Mastic	7% Chrysotile
Sample Composite Homogeneity: Poor	

Location: 2, White/Pink Floor Tile + Black Mastic

Lab ID-Version‡: 13784093-1

Sample Layers	Asbestos Content
Off-White Floor Tile	5% Chrysotile
Black Mastic	7% Chrysotile
Brown Floor Tile	5% Chrysotile
Black Mastic	7% Chrysotile
Sample Composite Homogeneity: Poor	

Location: 3, Black Wall Mastic

Lab ID-Version‡: 13784094-1

Sample Layers	Asbestos Content
Gray Cementitious Material with Tan Paint	ND
Black Mastic	ND
Sample Composite Homogeneity: Moderate	

Location: 4, Black Wall Mastic

Lab ID-Version‡: 13784095-1

Sample Layers	Asbestos Content
Gray Cementitious Material with Tan Paint	ND
Black Mastic	ND
Sample Composite Homogeneity: Moderate	

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

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 C/O: Mr Andrew Barchak, Nicole Lounsberry,
 Gracie Tiffany
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 Peoria, Illinois

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 Date of Report: 03-21-2022

ASBESTOS PLM REPORT

Location: 5, Window Glazing

Lab ID-Version‡: 13784096-1

Sample Layers	Asbestos Content
Gray Window Glazing	< 1% Chrysotile
Composite Non-Asbestos Content:	< 1% Cellulose
Sample Composite Homogeneity:	Good

Location: 6, Window Glazing

Lab ID-Version‡: 13784097-1

Sample Layers	Asbestos Content
Gray Window Glazing	< 1% Chrysotile
Composite Non-Asbestos Content:	< 1% Cellulose
Sample Composite Homogeneity:	Good

Location: 7, Cove Base + Mastic

Lab ID-Version‡: 13784098-1

Sample Layers	Asbestos Content
Black Baseboard	ND
Brown Mastic with Multilayered Paint	ND
Sample Composite Homogeneity:	Moderate

Location: 8, Cove Base + Mastic

Lab ID-Version‡: 13784099-1

Sample Layers	Asbestos Content
Black Baseboard	ND
Brown Mastic with Multilayered Paint	ND
Sample Composite Homogeneity:	Moderate

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 Date of Receipt: 03-16-2022
 Date of Report: 03-21-2022

ASBESTOS PLM REPORT

Location: 9, Acoustic Ceiling Tile (1)

Lab ID-Version‡: 13784100-1

Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	65% Cellulose 3% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 10, Acoustic Ceiling Tile (1)

Lab ID-Version‡: 13784101-1

Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	65% Cellulose 3% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 11, White Plaster

Lab ID-Version‡: 13784102-1

Sample Layers	Asbestos Content
White Skim Coat with Multilayered Paint	ND
Off-White Base Coat	ND
Sample Composite Homogeneity:	Moderate

Location: 12, White Plaster

Lab ID-Version‡: 13784103-1

Sample Layers	Asbestos Content
White Skim Coat with Multilayered Paint	ND
Off-White Base Coat	ND
Sample Composite Homogeneity:	Moderate

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 Date of Sampling: 03-09-2022
 Date of Receipt: 03-16-2022
 Date of Report: 03-21-2022

ASBESTOS PLM REPORT

Location: 13, White Plaster

Lab ID-Version‡: 13784104-1

Sample Layers	Asbestos Content
White Skim Coat with Multilayered Paint	ND
Off-White Base Coat	ND
Sample Composite Homogeneity:	Moderate

Location: 14, Acoustic Ceiling Tile-1 (1x1) + Glue Dots

Lab ID-Version‡: 13784105-1

Sample Layers	Asbestos Content
Off-White Ceiling Tile with White Surface	ND
Brown Glue	ND
White Compound with Multilayered Paint	ND
Composite Non-Asbestos Content:	60% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 15, Acoustic Ceiling Tile-1 (1x1) + Glue Dots

Lab ID-Version‡: 13784106-1

Sample Layers	Asbestos Content
Off-White Ceiling Tile with White Surface	ND
Brown Glue	ND
White Compound with Multilayered Paint	ND
Composite Non-Asbestos Content:	60% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 16, TSI Pipe Wrap

Lab ID-Version‡: 13784107-1

Sample Layers	Asbestos Content
White Wrap with Multilayered Paint	ND
Brown Insulation	ND
Composite Non-Asbestos Content:	80% Cellulose 10% Cotton
Sample Composite Homogeneity:	Moderate

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 Date of Sampling: 03-09-2022
 Date of Receipt: 03-16-2022
 Date of Report: 03-21-2022

ASBESTOS PLM REPORT

Location: 17, TSI Pipe Wrap

Lab ID-Version‡: 13784108-1

Sample Layers	Asbestos Content
White Wrap with Multilayered Paint	ND
Brown Insulation	ND
Composite Non-Asbestos Content:	80% Cellulose 10% Cotton
Sample Composite Homogeneity:	Moderate

Location: 18, TSI Pipe Wrap

Lab ID-Version‡: 13784109-1

Sample Layers	Asbestos Content
Brown Insulation	ND
Composite Non-Asbestos Content:	99% Cellulose
Sample Composite Homogeneity:	Good

Location: 19, TSI AirOCell Wrap

Lab ID-Version‡: 13784110-1

Sample Layers	Asbestos Content
White Wrap with White Paint	ND
Brown/White Insulation	70% Chrysotile
Composite Non-Asbestos Content:	7% Cotton 2% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 20, TSI AirOCell Wrap

Lab ID-Version‡: 13784111-1

Sample Layers	Asbestos Content
White Wrap with White Paint	ND
Gray/White Insulation	< 1% Amosite
Composite Non-Asbestos Content:	10% Glass Fibers 7% Cotton
Sample Composite Homogeneity:	Moderate

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ASBESTOS PLM REPORT

Location: 21, TSI AirOCell Wrap

Lab ID-Version‡: 13784112-1

Sample Layers	Asbestos Content
White Wrap with White Paint	ND
Brown/White Insulation	70% Chrysotile
Composite Non-Asbestos Content:	7% Cotton 2% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 22, Plaster + Skim Coat

Lab ID-Version‡: 13784113-1

Sample Layers	Asbestos Content
White Skim Coat with Beige Paint	ND
Gray Plaster with Multilayered Paint	ND
Composite Non-Asbestos Content:	< 1% Hair/Wool
Sample Composite Homogeneity:	Moderate

Location: 23, Plaster + Skim Coat

Lab ID-Version‡: 13784114-1

Sample Layers	Asbestos Content
White Skim Coat with Multilayered Paint	ND
Gray Base Coat	ND
Composite Non-Asbestos Content:	< 1% Hair/Wool
Sample Composite Homogeneity:	Moderate

Location: 24, Plaster + Skim Coat

Lab ID-Version‡: 13784115-1

Sample Layers	Asbestos Content
White Skim Coat with Multilayered Paint	ND
Gray Base Coat	ND
Composite Non-Asbestos Content:	< 1% Hair/Wool
Sample Composite Homogeneity:	Moderate

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ASBESTOS PLM REPORT

Location: 25, Plaster + Skim Coat

Lab ID-Version‡: 13784116-1

Sample Layers	Asbestos Content
White Compound with White Paint	ND
White Skim Coat with Multilayered Paint	ND
Gray Base Coat	ND
Composite Non-Asbestos Content:	< 1% Hair/Wool
Sample Composite Homogeneity:	Moderate

Location: 26, Plaster + Skim Coat

Lab ID-Version‡: 13784117-1

Sample Layers	Asbestos Content
White Skim Coat with Multilayered Paint	ND
Gray Base Coat	ND
Composite Non-Asbestos Content:	< 1% Hair/Wool
Sample Composite Homogeneity:	Moderate

Location: 27, Plaster + Skim Coat

Lab ID-Version‡: 13784118-1

Sample Layers	Asbestos Content
White Skim Coat with Multilayered Paint	ND
Gray Base Coat	ND
Composite Non-Asbestos Content:	< 1% Hair/Wool
Sample Composite Homogeneity:	Moderate

Location: 28, Plaster + Skim Coat

Lab ID-Version‡: 13784119-1

Sample Layers	Asbestos Content
White Compound with White Paint	ND
White Skim Coat with Multilayered Paint	ND
Gray Base Coat	ND
Composite Non-Asbestos Content:	< 1% Hair/Wool
Sample Composite Homogeneity:	Moderate

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ASBESTOS PLM REPORT

Location: 29, Floor Felt + White Paper

Lab ID-Version‡: 13784120-1

Sample Layers	Asbestos Content
Brown Felt	ND
White Paper	80% Chrysotile
Composite Non-Asbestos Content:	50% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 30, Floor Felt + White Paper

Lab ID-Version‡: 13784121-1

Sample Layers	Asbestos Content
Brown Felt	ND
White Paper	80% Chrysotile
Composite Non-Asbestos Content:	40% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 31, Floor Felt + White Paper

Lab ID-Version‡: 13784122-1

Sample Layers	Asbestos Content
Brown Felt	ND
White Paper	80% Chrysotile
Composite Non-Asbestos Content:	50% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 32, White Floor Tile + Mastic

Lab ID-Version‡: 13784123-1

Sample Layers	Asbestos Content
Yellow Mastic	ND
Off-White Floor Tile	5% Chrysotile
Brown Mastic	ND
Sample Composite Homogeneity:	Moderate

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ASBESTOS PLM REPORT

Location: 33, White Floor Tile + Mastic

Lab ID-Version‡: 13784124-1

Sample Layers	Asbestos Content
White Floor Tile	ND
Brown Mastic	ND
Sample Composite Homogeneity:	Moderate

Location: 34, White Sheet Flooring

Lab ID-Version‡: 13784125-1

Sample Layers	Asbestos Content
Beige Sheet Flooring with Fibrous Backing	ND
Yellow Mastic	ND
Composite Non-Asbestos Content:	15% Cellulose < 1% Glass Fibers < 1% Synthetic Fibers
Sample Composite Homogeneity:	Moderate

Location: 35, White Sheet Flooring

Lab ID-Version‡: 13784126-1

Sample Layers	Asbestos Content
Beige Sheet Flooring with Fibrous Backing	ND
Yellow Mastic	ND
Composite Non-Asbestos Content:	15% Cellulose < 1% Glass Fibers < 1% Synthetic Fibers
Sample Composite Homogeneity:	Moderate

Location: 36, Green Chalk + Mastic + Paper

Lab ID-Version‡: 13784127-1

Sample Layers	Asbestos Content
Tan Mastic	ND
Green Non-Fibrous Material (Chalk)	ND
Brown Paper	ND
Composite Non-Asbestos Content:	50% Cellulose
Sample Composite Homogeneity:	Moderate

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ASBESTOS PLM REPORT

Location: 37, Green Chalk + Mastic + Paper

Lab ID-Version‡: 13784128-1

Sample Layers	Asbestos Content
Tan Mastic	ND
Green Non-Fibrous Material (Chalk)	ND
Brown Paper	ND
Composite Non-Asbestos Content:	50% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 38, Drywall Composite-1 (drywall/tape/joint compound)

Lab ID-Version‡: 13784129-1

Sample Layers	Asbestos Content
White Compound with Multilayered Paint	< 1% Chrysotile
Cream Tape	ND
White Joint Compound	< 1% Chrysotile
White Drywall with Brown Paper	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Poor

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: 39, Drywall Composite-1 (drywall/tape/joint compound)

Lab ID-Version‡: 13784130-1

Sample Layers	Asbestos Content
White Compound with Multilayered Paint	< 1% Chrysotile
Cream Tape	ND
White Joint Compound	< 1% Chrysotile
White Drywall with Brown Paper	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Poor

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: 40, Ceiling Drywall

Lab ID-Version‡: 13784131-1

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Good

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ASBESTOS PLM REPORT

Location: 41, Ceiling Drywall

Lab ID-Version‡: 13784132-1

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Good

Location: 42, Roofing Materials

Lab ID-Version‡: 13784133-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Multicolored Pebbles	ND
Black Roofing Tar and Felt	ND
Black Roofing Shingle with Multicolored Pebbles	ND
Black Roofing Tar and Felt	ND
Composite Non-Asbestos Content:	10% Cellulose 5% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 43, Roofing Materials

Lab ID-Version‡: 13784134-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Multicolored Pebbles	ND
Black Roofing Tar and Felt	ND
Black Roofing Shingle with Multicolored Pebbles	ND
Black Roofing Tar	ND
Composite Non-Asbestos Content:	7% Cellulose 7% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 44, Grey Floor Tile + Mastic

Lab ID-Version‡: 13784135-1

Sample Layers	Asbestos Content
Gray Floor Tile	5% Chrysotile
Black Mastic	7% Chrysotile
Sample Composite Homogeneity:	Moderate

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ASBESTOS PLM REPORT

Location: 45, Grey Floor Tile + Mastic

Lab ID-Version‡: 13784136-1

Sample Layers	Asbestos Content
Gray Floor Tile	5% Chrysotile
Black Mastic	7% Chrysotile
Sample Composite Homogeneity: Moderate	

Location: 46, Acoustic Ceiling Tile-2 (1x1) + Brown Glue Dots

Lab ID-Version‡: 13784137-1

Sample Layers	Asbestos Content
White Ceiling Tile with White Surface	ND
Brown Glue	ND
Tan Glue	ND
Composite Non-Asbestos Content:	50% Glass Fibers < 1% Talc
Sample Composite Homogeneity: Moderate	

Location: 47, Acoustic Ceiling Tile-2 (1x1) + Brown Glue Dots

Lab ID-Version‡: 13784138-1

Sample Layers	Asbestos Content
White Ceiling Tile with White Surface	ND
Brown Glue	ND
Tan Glue	ND
Composite Non-Asbestos Content:	50% Glass Fibers < 1% Talc
Sample Composite Homogeneity: Moderate	

Location: 48, Green Floor Tile + Mastic

Lab ID-Version‡: 13784139-1

Sample Layers	Asbestos Content
Gray Floor Tile	5% Chrysotile
Black Mastic	7% Chrysotile
Sample Composite Homogeneity: Moderate	

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ASBESTOS PLM REPORT

Location: 49, Green Floor Tile + Mastic

Lab ID-Version‡: 13784140-1

Sample Layers	Asbestos Content
Gray Floor Tile	5% Chrysotile
Black Mastic	7% Chrysotile
Sample Composite Homogeneity: Moderate	

Location: 50, Drywall Composite-2 (drywall/tape/joint compound)

Lab ID-Version‡: 13784141-1

Sample Layers	Asbestos Content
White Compound with Tan Paint	ND
Cream Tape	ND
White Joint Compound	ND
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity: Poor	

Location: 51, Drywall Composite-2 (drywall/tape/joint compound)

Lab ID-Version‡: 13784142-1

Sample Layers	Asbestos Content
White Compound with Tan Paint	ND
Cream Tape	ND
White Joint Compound	ND
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity: Poor	

Location: 52, TSI AirOCell Wrap

Lab ID-Version‡: 13784143-1

Sample Layers	Asbestos Content
Cream Woven Material	ND
Off-White Wrap	80% Chrysotile
Composite Non-Asbestos Content:	10% Cotton
Sample Composite Homogeneity: Moderate	

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ASBESTOS PLM REPORT

Location: 53, TSI AirOCell Wrap

Lab ID-Version‡: 13784144-1

Sample Layers	Asbestos Content
Off-White Wrap	80% Chrysotile
Pink Insulation	ND
Composite Non-Asbestos Content:	5% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 54, TSI AirOCell Wrap

Lab ID-Version‡: 13784145-1

Sample Layers	Asbestos Content
Cream Woven Material with Multilayered Paint	ND
Off-White Wrap	80% Chrysotile
Composite Non-Asbestos Content:	10% Cotton
Sample Composite Homogeneity:	Moderate

Location: 55, Plaster + Skim Coat (2)

Lab ID-Version‡: 13784146-1

Sample Layers	Asbestos Content
White Plaster with Multilayered Paint	ND
Off-White Plaster	ND
Composite Non-Asbestos Content:	< 1% Hair/Wool
Sample Composite Homogeneity:	Moderate

Location: 56, Plaster + Skim Coat (2)

Lab ID-Version‡: 13784147-1

Sample Layers	Asbestos Content
White Plaster	ND
Off-White Plaster	ND
Sample Composite Homogeneity:	Moderate

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ASBESTOS PLM REPORT

Location: 57, Plaster + Skim Coat (2)

Lab ID-Version‡: 13784148-1

Sample Layers	Asbestos Content
White Plaster	ND
Off-White Plaster	ND
Sample Composite Homogeneity: Moderate	

Location: 58, Plaster + Skim Coat (2)

Lab ID-Version‡: 13784149-1

Sample Layers	Asbestos Content
White Plaster	ND
Off-White Plaster	ND
Sample Composite Homogeneity: Moderate	

Location: 59, Plaster + Skim Coat (2)

Lab ID-Version‡: 13784150-1

Sample Layers	Asbestos Content
White Plaster with Cream Paint	ND
Off-White Plaster	ND
Sample Composite Homogeneity: Moderate	

Location: 60, Plaster + Skim Coat (2)

Lab ID-Version‡: 13784151-1

Sample Layers	Asbestos Content
White Plaster with Multilayered Paint	ND
Off-White Plaster	ND
Sample Composite Homogeneity: Moderate	

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ASBESTOS PLM REPORT

Location: 61, Plaster + Skim Coat (2)

Lab ID-Version‡: 13784152-1

Sample Layers	Asbestos Content
White Plaster with Multilayered Paint	ND
Off-White Plaster	ND
Sample Composite Homogeneity: Moderate	

Location: 62, Door Window Glazing

Lab ID-Version‡: 13784153-1

Sample Layers	Asbestos Content
White Window Glazing	ND
Sample Composite Homogeneity: Good	

Location: 63, Door Window Glazing

Lab ID-Version‡: 13784154-1

Sample Layers	Asbestos Content
White Window Glazing	ND
Sample Composite Homogeneity: Good	

Location: 64, Cove Base + Mastic

Lab ID-Version‡: 13784155-1

Sample Layers	Asbestos Content
Black Baseboard Tile	8% Chrysotile
Black Mastic	10% Chrysotile
Sample Composite Homogeneity: Moderate	

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ASBESTOS PLM REPORT

Location: 65, Cove Base + Mastic

Lab ID-Version‡: 13784156-1

Sample Layers	Asbestos Content
Black Baseboard Tile	8% Chrysotile
Black Mastic	10% Chrysotile
Sample Composite Homogeneity: Moderate	

Location: 66, White Floor Tile + Mastic

Lab ID-Version‡: 13784157-1

Sample Layers	Asbestos Content
Cream Non-Fibrous Material	ND
White Floor Tile	6% Chrysotile
Black Mastic	ND
Sample Composite Homogeneity: Poor	

Location: 67, White Floor Tile + Mastic

Lab ID-Version‡: 13784158-1

Sample Layers	Asbestos Content
Cream Non-Fibrous Material	ND
White Floor Tile	6% Chrysotile
Black Mastic	ND
Sample Composite Homogeneity: Poor	

Location: 68, Red Floor Tile + Black Mastic

Lab ID-Version‡: 13784159-1

Sample Layers	Asbestos Content
Red Floor Tile	ND
Black Mastic	ND
Sample Composite Homogeneity: Moderate	

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‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: Environmental Works
 C/O: Mr Andrew Barchak, Nicole Lounsberry,
 Gracie Tiffany
 Re: 220669; ACM Inspection - 2702 W Krause Ave,
 Peoria, Illinois

Eurofins EMLab P&K
 1501 West Knudsen Drive, Phoenix, AZ 85027
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 Date of Sampling: 03-09-2022
 Date of Receipt: 03-16-2022
 Date of Report: 03-21-2022

ASBESTOS PLM REPORT

Location: 69, Red Floor Tile + Black Mastic

Lab ID-Version‡: 13784160-1

Sample Layers	Asbestos Content
Orange Floor Tile	6% Chrysotile
Black Mastic	8% Chrysotile
Sample Composite Homogeneity: Moderate	

Location: 70, White Floor Tile (12) + Black Mastic

Lab ID-Version‡: 13784161-1

Sample Layers	Asbestos Content
White Floor Tile	ND
Yellow Mastic	ND
Black Mastic	ND
Sample Composite Homogeneity: Poor	

Location: 71, White Floor Tile (12) + Black Mastic

Lab ID-Version‡: 13784162-1

Sample Layers	Asbestos Content
White Floor Tile	ND
Yellow Mastic	ND
Black Mastic	ND
Sample Composite Homogeneity: Poor	

Location: 72, Acoustic Ceiling Tile (2)

Lab ID-Version‡: 13784163-1

Sample Layers	Asbestos Content
Gray Acoustic Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	65% Cellulose < 1% Glass Fibers
Sample Composite Homogeneity: Good	

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 Date of Receipt: 03-16-2022
 Date of Report: 03-21-2022

ASBESTOS PLM REPORT

Location: 73, Acoustic Ceiling Tile (2)

Lab ID-Version‡: 13784164-1

Sample Layers	Asbestos Content
Gray Acoustic Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	65% Cellulose < 1% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 74, Acoustic Ceiling Tile-3 (1x1) + Brown Glue Dots

Lab ID-Version‡: 13784165-1

Sample Layers	Asbestos Content
White Acoustic Ceiling Tile with White Paint	ND
Brown Mastic	ND
White Plaster	ND
Composite Non-Asbestos Content:	60% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 75, Acoustic Ceiling Tile-3 (1x1) + Brown Glue Dots

Lab ID-Version‡: 13784166-1

Sample Layers	Asbestos Content
White Acoustic Ceiling Tile with White Paint	ND
Brown Mastic	ND
Composite Non-Asbestos Content:	60% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 76, Plaster + Skim Coat (3)

Lab ID-Version‡: 13784167-1

Sample Layers	Asbestos Content
White Plaster with Cream Paint	ND
Beige Plaster	ND
Composite Non-Asbestos Content:	< 1% Hair/Wool
Sample Composite Homogeneity:	Moderate

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ASBESTOS PLM REPORT

Location: 77, Plaster + Skim Coat (3)

Lab ID-Version‡: 13784168-1

Sample Layers	Asbestos Content
White Plaster with Cream Paint	ND
Beige Plaster	ND
Composite Non-Asbestos Content:	< 1% Hair/Wool
Sample Composite Homogeneity:	Moderate

Location: 78, Plaster + Skim Coat (3)

Lab ID-Version‡: 13784169-1

Sample Layers	Asbestos Content
White Plaster with Cream Paint	ND
Beige Plaster	ND
Composite Non-Asbestos Content:	< 1% Hair/Wool
Sample Composite Homogeneity:	Moderate

Location: 79, Roof Edge (Gym)

Lab ID-Version‡: 13784170-1

Sample Layers	Asbestos Content
Black Roofing Material with Silver Paint	ND
Black Roofing Tar	ND
Composite Non-Asbestos Content:	2% Synthetic Fibers
Sample Composite Homogeneity:	Moderate

Location: 80, Roof Deck (Gym)

Lab ID-Version‡: 13784171-1

Sample Layers	Asbestos Content
Black Roofing Material with Silver Paint	ND
Black Roofing Tar	ND
Yellow Foam	ND
Composite Non-Asbestos Content:	2% Synthetic Fibers
Sample Composite Homogeneity:	Poor

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ASBESTOS PLM REPORT

Location: 81, Door Caulk (1)

Lab ID-Version‡: 13784172-1

Sample Layers	Asbestos Content
Off-White Caulk	ND
Sample Composite Homogeneity: Good	

Location: 82, Door Caulk (1)

Lab ID-Version‡: 13784173-1

Sample Layers	Asbestos Content
Off-White Caulk	ND
Sample Composite Homogeneity: Good	

Location: 83, Window Caulk (1)

Lab ID-Version‡: 13784174-1

Sample Layers	Asbestos Content
Light Gray Caulk	ND
Sample Composite Homogeneity: Good	

Location: 84, Window Caulk (1)

Lab ID-Version‡: 13784175-1

Sample Layers	Asbestos Content
Light Gray Caulk	ND
Sample Composite Homogeneity: Good	

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 Date of Report: 03-21-2022

ASBESTOS PLM REPORT

Location: 85, Window Caulk (2)

Lab ID-Version‡: 13784176-1

Sample Layers	Asbestos Content
Red Caulk	ND
Sample Composite Homogeneity: Good	

Location: 86, Window Caulk (2)

Lab ID-Version‡: 13784177-1

Sample Layers	Asbestos Content
Red Caulk	ND
Sample Composite Homogeneity: Good	

Location: 87, Door Caulk (2)

Lab ID-Version‡: 13784178-1

Sample Layers	Asbestos Content
Off-White Caulk with Multilayered Paint	ND
Sample Composite Homogeneity: Good	

Location: 88, Door Caulk (2)

Lab ID-Version‡: 13784179-1

Sample Layers	Asbestos Content
Off-White Caulk with Multilayered Paint	ND
Sample Composite Homogeneity: Good	

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Weather		Fog	Rain	Snow	Wind	Clear
Level	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Light	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Moderate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Heavy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

EMLab ID
2874509

REQUESTED SERVICES (Use checkboxes below)					
Asbestos PLM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CONTACT INFORMATION						
Company:	Environmental Works (30602)		Address: 1731 Locust Street Kansas City, MO 64108			
Contact:	Andrew Barchak, Nicole Lounsberry, Gracie Tiffany		Special Instructions:			
Phone:	816-285-8433					
PROJECT INFORMATION				TURN AROUND TIME CODES (TAT)		
Project ID:	220669		STD - Standard (DEFAULT)		Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.	
Project Description:	ACM Inspection - 2702 W Krause Ave, Peoria, Illinois		ND - Next Business Day			
Project Zip Code:	66549	Sampling Date & Time:	03/09/2022 09:00 AM			
PO Number:	220669		SD - Same Business Day Rush			
	Sampled By: Andrew Barchak		WH - Weekend / Holiday			
Sample ID	Description	Sample Type (Below)	TAT (Above)	Volume / Area (as applicable)	ISO Class (as applicable)	Notes (Time of day, Temp, RH, etc.)
1	White/Pink Floor Tile + Black Mastic	B	STD	N/A		
2	White/Pink Floor Tile + Black Mastic	B	STD	N/A		
3	Black Wall Mastic	B	STD	N/A		
4	Black Wall Mastic	B	STD	N/A		
5	Window Glazing	B	STD	N/A		
6	Window Glazing	B	STD	N/A		
7	Cove Base + Mastic	B	STD	N/A		
8	Cove Base + Mastic	B	STD	N/A		
9	Acoustic Ceiling Tile (1)	B	STD	N/A		
10	Acoustic Ceiling Tile (1)	B	STD	N/A		
11	White Plaster	B	STD	N/A		

SAMPLE TYPE CODES	RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
B - Bulk sample	ANDREW J BARCHAK	3/14/2022 4:30 PM		

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Weather		Fog	Rain	Snow	Wind	Clear
Level	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Light	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Moderate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Heavy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

EMLab ID
2874509

REQUESTED SERVICES
(Use checkboxes below)

Asbestos PLM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CONTACT INFORMATION

Company:	Environmental Works (30602)	Address: 1731 Locust Street Kansas City, MO 64108
Contact:	Andrew Barchak, Nicole Lounsbury, Gracie Tiffany	Special Instructions:
Phone:	816-285-8433	

PROJECT INFORMATION

TURN AROUND TIME CODES (TAT)

Project ID:	220669	STD - Standard (DEFAULT)		Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.	
Project Description:	ACM Inspection - 2702 W Krause Ave, Peoria, Illinois	ND - Next Business Day			
Project Zip Code:	66549	Sampling Date & Time:	03/09/2022 09:00 AM		SD - Same Business Day Rush
PO Number:	220669	Sampled By: Andrew Barchak			WH - Weekend / Holiday

Sample ID	Description	Sample Type (Below)	TAT (Above)	Volume / Area (as applicable)	ISO Class (as applicable)	Notes (Time of day, Temp, RH, etc.)
12	White Plaster	B	STD	N/A		
13	White Plaster	B	STD	N/A		
14	Acoustic Ceiling Tile-1 (1x1) + Glue Dots	B	STD	N/A		
15	Acoustic Ceiling Tile-1 (1x1) + Glue Dots	B	STD	N/A		
16	TSI Pipe Wrap	B	STD	N/A		
17	TSI Pipe Wrap	B	STD	N/A		
18	TSI Pipe Wrap	B	STD	N/A		
19	TSI AirOCell Wrap	B	STD	N/A		
20	TSI AirOCell Wrap	B	STD	N/A		
21	TSI AirOCell Wrap	B	STD	N/A		
22	Plaster + Skim Coat	B	STD	N/A		

SAMPLE TYPE CODES	RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
B - Bulk sample	ANDREW J BARCHAK	3/14/2022 4:30 PM		

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Weather		Fog	Rain	Snow	Wind	Clear
Level	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Light	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Moderate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Heavy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

EMLab ID
2874509

REQUESTED SERVICES (Use checkboxes below)						
Asbestos PLM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CONTACT INFORMATION							
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Contact:	Andrew Barchak, Nicole Lounsbury, Gracie Tiffany		Special Instructions:				
Phone:	816-285-8433						
PROJECT INFORMATION			TURN AROUND TIME CODES (TAT)				
Project ID:	220669		STD - Standard (DEFAULT)		Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.		
Project Description:	ACM Inspection - 2702 W Krause Ave, Peoria, Illinois		ND - Next Business Day				
Project Zip Code:	66549	Sampling Date & Time:	03/09/2022 09:00 AM				
PO Number:	220669	Sampled By:	Andrew Barchak				
	Sample ID	Description	Sample Type (Below)	TAT (Above)	Volume / Area (as applicable)	ISO Class (as applicable)	Notes (Time of day, Temp, RH, etc.)
	23	Plaster + Skim Coat	B	STD	N/A		
	24	Plaster + Skim Coat	B	STD	N/A		
	25	Plaster + Skim Coat	B	STD	N/A		
	26	Plaster + Skim Coat	B	STD	N/A		
	27	Plaster + Skim Coat	B	STD	N/A		
	28	Plaster + Skim Coat	B	STD	N/A		
	29	Floor Felt + White Paper	B	STD	N/A		
	30	Floor Felt + White Paper	B	STD	N/A		
	31	Floor Felt + White Paper	B	STD	N/A		
	32	White Floor Tile + Mastic	B	STD	N/A		
	33	White Floor Tile + Mastic	B	STD	N/A		

SAMPLE TYPE CODES	RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
B - Bulk sample	ANDREW J BARCHAK	3/14/2022 4:30 PM		

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Weather		Fog	Rain	Snow	Wind	Clear
Level	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Light	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Moderate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Heavy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

EMLab ID
2874509

REQUESTED SERVICES (Use checkboxes below)					
Asbestos PLM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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CONTACT INFORMATION						
Company:	Environmental Works (30602)		Address: 1731 Locust Street Kansas City, MO 64108			
Contact:	Andrew Barchak, Nicole Lounsberry, Gracie Tiffany		Special Instructions:			
Phone:	816-285-8433					
PROJECT INFORMATION			TURN AROUND TIME CODES (TAT)			
Project ID:	220669		STD - Standard (DEFAULT)		Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.	
Project Description:	ACM Inspection - 2702 W Krause Ave, Peoria, Illinois		ND - Next Business Day			
Project Zip Code:	66549	Sampling Date & Time:	03/09/2022 09:00 AM			
PO Number:	220669		Sampled By: Andrew Barchak			
	SD - Same Business Day Rush					
	WH - Weekend / Holiday					
Sample ID	Description	Sample Type (Below)	TAT (Above)	Volume / Area (as applicable)	ISO Class (as applicable)	Notes (Time of day, Temp, RH, etc.)
34	White Sheet Flooring	B	STD	N/A		
35	White Sheet Flooring	B	STD	N/A		
36	Green Chalk + Mastic + Paper	B	STD	N/A		
37	Green Chalk + Mastic + Paper	B	STD	N/A		
38	Drywall Composite-1 (drywall/tape/joint compound)	B	STD	N/A		
39	Drywall Composite-1 (drywall/tape/joint compound)	B	STD	N/A		
40	Ceiling Drywall	B	STD	N/A		
41	Ceiling Drywall	B	STD	N/A		
42	Roofing Materials	B	STD	N/A		
43	Roofing Materials	B	STD	N/A		
44	Grey Floor Tile + Mastic	B	STD	N/A		

SAMPLE TYPE CODES	RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
B - Bulk sample	ANDREW J BARCHAK	3/14/2022 4:30 PM		

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SSF, CA: 6000 Shoreline Court, Suite 205, South San Francisco, CA 94080 * (866) 888-6653

Weather		Fog	Rain	Snow	Wind	Clear
Level	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Light	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Moderate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Heavy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

EMLab ID
2874509

REQUESTED SERVICES
(Use checkboxes below)

Asbestos PLM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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PROJECT INFORMATION			TURN AROUND TIME CODES (TAT)			
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Project Description:	ACM Inspection - 2702 W Krause Ave, Peoria, Illinois		ND - Next Business Day			
Project Zip Code:	66549	Sampling Date & Time:	03/09/2022 09:00 AM			
PO Number:	220669		Sampled By: Andrew Barchak			
	SD - Same Business Day Rush					
	WH - Weekend / Holiday					
Sample ID	Description	Sample Type (Below)	TAT (Above)	Volume / Area (as applicable)	ISO Class (as applicable)	Notes (Time of day, Temp, RH, etc.)
45	Grey Floor Tile + Mastic	B	STD	N/A		
46	Acoustic Ceiling Tile-2 (1x1) + Brown Glue Dots	B	STD	N/A		
47	Acoustic Ceiling Tile-2 (1x1) + Brown Glue Dots	B	STD	N/A		
48	Green Floor Tile + Mastic	B	STD	N/A		
49	Green Floor Tile + Mastic	B	STD	N/A		
50	Drywall Composite-2 (drywall/tape/joint compound)	B	STD	N/A		
51	Drywall Composite-2 (drywall/tape/joint compound)	B	STD	N/A		
52	TSI AirOCell Wrap	B	STD	N/A		
53	TSI AirOCell Wrap	B	STD	N/A		
54	TSI AirOCell Wrap	B	STD	N/A		
55	Plaster + Skim Coat (2)	B	STD	N/A		

SAMPLE TYPE CODES	RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
B - Bulk sample	ANDREW J BARCHAK	3/14/2022 4:30 PM		

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Weather		Fog	Rain	Snow	Wind	Clear
Level	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Light	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Moderate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Heavy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

EMLab ID
2874509

REQUESTED SERVICES
(Use checkboxes below)

Asbestos PLM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Contact:	Andrew Barchak, Nicole Lounsberry, Gracie Tiffany	Special Instructions:				
Phone:	816-285-8433					
PROJECT INFORMATION			TURN AROUND TIME CODES (TAT)			
Project ID:	220669		STD - Standard (DEFAULT)		Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.	
Project Description:	ACM Inspection - 2702 W Krause Ave, Peoria, Illinois		ND - Next Business Day			
Project Zip Code:	66549	Sampling Date & Time:	03/09/2022 09:00 AM			
PO Number:	220669	Sampled By: Andrew Barchak		SD - Same Business Day Rush		
			WH - Weekend / Holiday			
Sample ID	Description	Sample Type (Below)	TAT (Above)	Volume / Area (as applicable)	ISO Class (as applicable)	Notes (Time of day, Temp, RH, etc.)
56	Plaster + Skim Coat (2)	B	STD	N/A		
57	Plaster + Skim Coat (2)	B	STD	N/A		
58	Plaster + Skim Coat (2)	B	STD	N/A		
59	Plaster + Skim Coat (2)	B	STD	N/A		
60	Plaster + Skim Coat (2)	B	STD	N/A		
61	Plaster + Skim Coat (2)	B	STD	N/A		
62	Door Window Glazing	B	STD	N/A		
63	Door Window Glazing	B	STD	N/A		
64	Cove Base + Mastic	B	STD	N/A		
65	Cove Base + Mastic	B	STD	N/A		
66	White Floor Tile + Mastic	B	STD	N/A		

SAMPLE TYPE CODES	RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
B - Bulk sample	ANDREW J BARCHAK	3/14/2022 4:30 PM		

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Weather		Fog	Rain	Snow	Wind	Clear
Level	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Light	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Moderate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Heavy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

EMLab ID
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REQUESTED SERVICES
(Use checkboxes below)

Asbestos PLM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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CONTACT INFORMATION						
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Contact:	Andrew Barchak, Nicole Lounsbury, Gracie Tiffany		Special Instructions:			
Phone:	816-285-8433					
PROJECT INFORMATION			TURN AROUND TIME CODES (TAT)			
Project ID:	220669		STD - Standard (DEFAULT)		Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.	
Project Description:	ACM Inspection - 2702 W Krause Ave, Peoria, Illinois		ND - Next Business Day			
Project Zip Code:	66549	Sampling Date & Time:	03/09/2022 09:00 AM			
PO Number:	220669		Sampled By: Andrew Barchak			
	SD - Same Business Day Rush					
	WH - Weekend / Holiday					
Sample ID	Description	Sample Type (Below)	TAT (Above)	Volume / Area (as applicable)	ISO Class (as applicable)	Notes (Time of day, Temp, RH, etc.)
67	White Floor Tile + Mastic	B	STD	N/A		
68	Red Floor Tile + Black Mastic	B	STD	N/A		
69	Red Floor Tile + Black Mastic	B	STD	N/A		
70	White Floor Tile (12) + Black Mastic	B	STD	N/A		
71	White Floor Tile (12) + Black Mastic	B	STD	N/A		
72	Acoustic Ceiling Tile (2)	B	STD	N/A		
73	Acoustic Ceiling Tile (2)	B	STD	N/A		
74	Acoustic Ceiling Tile-3 (1x1) + Brown Glue Dots	B	STD	N/A		
75	Acoustic Ceiling Tile-3 (1x1) + Brown Glue Dots	B	STD	N/A		
76	Plaster + Skim Coat (3)	B	STD	N/A		
77	Plaster + Skim Coat (3)	B	STD	N/A		

SAMPLE TYPE CODES	RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
B - Bulk sample	ANDREW J BARCHAK	3/14/2022 4:30 PM		

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Weather		Fog	Rain	Snow	Wind	Clear
Level	None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Light	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Moderate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Heavy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

EMLab ID
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Asbestos PLM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Sample ID	Description	Sample Type (Below)	TAT (Above)	Volume / Area (as applicable)	ISO Class (as applicable)	Notes (Time of day, Temp, RH, etc.)
78	Plaster + Skim Coat (3)	B	STD	N/A		
79	Roof Edge (Gym)	B	STD	N/A		
80	Roof Deck (Gym)	B	STD	N/A		
81	Door Caulk (1)	B	STD	N/A		
82	Door Caulk (1)	B	STD	N/A		
83	Window Caulk (1)	B	STD	N/A		
84	Window Caulk (1)	B	STD	N/A		
85	Window Caulk (2)	B	STD	N/A		
86	Window Caulk (2)	B	STD	N/A		
87	Door Caulk (2)	B	STD	N/A		
88	Door Caulk (2)	B	STD	N/A		

SAMPLE TYPE CODES	RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
B - Bulk sample	ANDREW J BARCHAK	3/14/2022 4:30 PM		

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APPENDIX D

XRF Performance Characteristic Sheet

Performance Characteristic Sheet

EFFECTIVE DATE: December 1, 2015

MANUFACTURER AND MODEL:

Make: *Heuresis*
Models: *Model Pb200i*
Source: *⁵⁷Co, 5 mCi (nominal – new source)*

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Action Level mode

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm ² (inclusive)

SUBSTRATE CORRECTION:

Not applicable

INCONCLUSIVE RANGE OR THRESHOLD:

ACTION LEVEL MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm²)
Results not corrected for substrate bias on any substrate	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated using test results on building components in the HUD archive. Testing was conducted on 146 test samples in November 2015, with two separate instruments running software version 2.1-2 in Action Level test mode. The actual source strength of each instrument on the day of testing was approximately 2.0 mCi; source ages were approximately one year.

OPERATING PARAMETERS

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

XRF CALIBRATION CHECK:

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm² in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm² film).

If the average (rounded to 1 decimal place) of three readings is outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instrument into control before XRF testing proceeds.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Chapter 7 of the HUD Guidelines provides guidance on correcting XRF results for substrate bias. Supplemental guidance for using the paint film nearest 1.0 mg/cm² for substrate correction is provided:

XRF results are corrected for substrate bias by subtracting from each XRF result a correction value determined separately in each house for single-family housing or in each development for multifamily housing, for each substrate. The correction value is an average of XRF readings taken over the NIST SRM paint film nearest to 1.0 mg/cm² at test locations that have been scraped bare of their paint covering. Compute the correction values as follows:

Using the same XRF instrument, take three readings on a bare substrate area covered with the NIST SRM paint film nearest 1 mg/cm². Repeat this procedure by taking three more readings on a second bare substrate area of the same substrate covered with the NIST SRM.

Compute the correction value for each substrate type where XRF readings indicate substrate correction is needed by computing the average of all six readings as shown below.

For each substrate type (the 1.02 mg/cm² NIST SRM is shown in this example; use the actual lead loading of the NIST SRM used for substrate correction):

$$\text{Correction value} = (1\text{st} + 2\text{nd} + 3\text{rd} + 4\text{th} + 5\text{th} + 6\text{th Reading})/6 - 1.02 \text{ mg/cm}^2$$

Repeat this procedure for each substrate requiring substrate correction in the house or housing development.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing.

Conduct XRF re-testing at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below. Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family and multi-family housing, a result is defined as a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and the retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF readings.

Compute the average of all ten re-test XRF readings.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

In the Action Level paint test mode, the instrument takes the longest time to complete readings close to the Federal standard of 1.0 mg/cm². The table below shows the mean and standard deviation of actual reading times by reading level for paint samples during the November 2015 archive testing. The tested instruments reported readings to one decimal place. No significant differences in reading times by substrate were observed. These times apply only to instruments with the same source strength as those tested (2.0 mCi). Instruments with stronger sources will have shorter reading times and those with weaker sources, longer reading times, than those in the table.

Mean and Standard Deviation of Reading Times in Action Level Mode by Reading Level		
Reading (mg/cm²)	Mean Reading Time (seconds)	Standard Deviation (seconds)
< 0.7	3.48	0.47
0.7	7.29	1.92
0.8	13.95	1.78
0.9 – 1.2	15.25	0.66
1.3 – 1.4	6.08	2.50
≥ 1.5	3.32	0.05

CLASSIFICATION OF RESULTS:

XRF results are classified as **positive** if they are **greater than or equal** to the stated threshold for the instrument (1.0 mg/cm²), and *negative* if they are *less than* the threshold.

DOCUMENTATION:

A report titled *Methodology for XRF Performance Characteristic Sheets* (EPA 747-R-95-008) provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. The report may be downloaded at <http://www2.epa.gov/lead/methodology-xrf-performance-characteristic-sheets-epa-747-r-95-008-september-1997>.

This XRF Performance Characteristic Sheet (PCS) was developed by QuanTech, Inc., under a contract with the XRF manufacturer.

APPENDIX E

Interpretation of XRF Field Data

INTERPRETATION OF XRF FIELD DATA

PAINT CONDITIONS

During the inspection, the paint is categorized as being in one of three conditions: Intact, Fair or Poor. The categorization of paint condition is based on total area of deteriorated paint on each component pursuant to the HUD chart below:

Type Of Building Component	Intact	Fair	Poor/Defective
Large Exterior Surfaces	Entire Surface is intact	Less than or equal to 10 sq/ft	More than 10 sq/ft
Interior Components of large surfaces: ceiling walls, doors, ceilings	Entire Surface is intact	Less than or equal to 2 sq/ft	More than 2 sq/ft
Interior & Exterior small surface areas: windows sills, baseboards, etc	Entire Surface is intact	Less than or equal to 10% of total surface areas	More than 10% of total surface area

Intact - Intact is defined as paint, which is not flaking, peeling or chalking (i.e. you cannot lift the paint from the substrate with your fingernail). Components coated with intact LBP do not pose a lead hazard to the occupants. However, since conditions can change over time, the owner should inspect the lead positive components periodically for indications of damage. Moreover, the owner should possess an Operations & Maintenance Plan describing safe ways reducing the likelihood of developing lead hazards.

Fair - Fair surfaces should be repaired but are not yet considered a lead hazard.

Poor/Defective Surface - LBP in poor condition (i.e. flaking or peeling) poses a lead hazard and should be corrected. Poor paint will continue to erode, increasing the likelihood of lead dust or paint chips falling to the ground. At a minimum, poor surfaces should be stabilized via wet scraping or sanding and then repainted. We recommend that the owner retain a Department of Health Services certified lead abatement worker or contractor supervisor to perform the wet sanding or scraping.

BUILDING DESCRIPTIONS

Each side of the building is assigned a letter (Side 'A', Side 'B', Side 'C', and Side 'D'). The side of the building where the front entrance is located is designated Side 'A'. The three remaining sides of the building are labeled clockwise as follows: standing inside the building, with back to the front entrance (the 'A' side), the side on the left is 'B', the rear side is 'C', and the side to the right is 'D'. For exterior surfaces, when facing the front entrance of the building, the front entrance side is 'A', and, proceeding clockwise, the left side is 'B', the rear side is 'C', and the right side is 'D'.

Within the building, the sides of each room are assigned letters in the same way as the interior as a whole. That is, when standing in any interior room, with the front entrance of the building behind where one is standing, the side which is parallel to the front entrance is designated side 'A', and, again proceeding clockwise, the side on the left is 'B', the side one is facing (parallel to the rear side of the building) is 'C', and the right side is 'D'

ROOM DESIGNATIONS

Each room is assigned a number. The number assigned each room is provided on Figures and is indicated as the room on the LBP Survey Record Sheet.

SUBSTRATE

The material to which a coating such as paint is applied. Residential substrates are usually wood, plaster, masonry, gypsum board, or metal, including components such as doors and door frames, windows and window trim, other trim, walls, ceilings, cabinets, and other built-in storage.

SURFACE

The outer or topmost boundary of a substrate.

“LEAD SPEAK” – A BRIEF GLOSSARY

Lead-Based Paint: Paint or other surface coatings that contain lead equal to or exceeding 1.0 milligram per square centimeter or 0.5 percent by weight or 5,000 parts per million (ppm) by weight.

Lead-Containing Paint – Paint or other surface coatings that contain lead greater than 0.0 mg/cm² of lead, but less than 1.0 mg/cm² of lead, as determined by XRF.

Lead-Based Paint Hazards: Any condition that causes exposure to lead from dust-lead hazards, soil-lead hazards, or lead-based paint that is deteriorated or present in chewable surfaces, friction surfaces, or impact surfaces, and that would result in adverse human health effects.

Visual Assessment: A visual inspection of interior and exterior surfaces to identify specific conditions that may be lead-based paint hazards. A visual inspection does not identify lead-based paint. The assessment may be performed by a person trained in visual assessment. Training for visual assessment is available on HUD’s website at www.hud.gov/offices/lead.

LEAD HAZARD EVALUATION

Paint Testing: Testing of specific surfaces, by XRF (x-ray fluorescence) or lab analysis, to determine the lead content of these surfaces, performed by a federal or state-certified lead-based paint inspector or risk assessor.

Lead-Based Paint Inspection: A surface-by-surface investigation to determine the presence of lead-based paint and the provision of a report explaining the results of the investigation. It is performed by a certified paint inspector or risk assessor.

Risk Assessment: A comprehensive evaluation for lead-based paint hazards that includes paint testing, dust and soil sampling, and a visual evaluation. The risk assessment report identifies lead hazards and appropriate lead hazard reduction methods. A certified risk assessor must conduct the assessment.

Lead Hazard Screen: A limited risk assessment activity that can be performed instead of a risk assessment in units that meet certain criteria (e.g. good condition). The screen must be performed by a certified risk assessor. If the unit fails the lead hazard screen, a full risk assessment must be performed.

Clearance Examination: Clearance is performed after hazard reduction, rehabilitation or maintenance activities to determine if a unit is safe for occupancy. It involves a visual assessment, analysis of dust samples, and preparation of report. The certified risk assessor, paint inspector, or lead sampling technician (called a clearance technician in the HUD regulation) performing clearance must be independent from the entity/individual conducting paint stabilization or hazard reduction.

LEAD HAZARD REDUCTION

Paint Stabilization: An interim control method that stabilizes painted surfaces and addressed the underlying cause of deterioration. Steps include repairing defective surfaces, removing loose paint and applying new paint.

Interim Controls: Set of measures to temporarily control lead-based paint hazards. Interim control methods must be completed by qualified workers using safe work practices. Follow-up monitoring is needed.

Standard Treatments: A complete set of interim control methods that when used together temporarily control all potential lead hazards in a unit. Because they address all conditions, a risk assessment or other evaluation is not needed. Standard treatments must be completed by qualified workers using safe work practices. As with interim controls, follow-up monitoring is needed.

Abatement: Measures to permanently control (i.e., 20 years or more) lead-based paint or lead-based paint hazards. EPA regulations exclude from the definition of abatement “renovation, remodeling, landscaping or other activities, when such activities are not designed to permanently eliminate lead-based paint hazards, but instead are designed to repair, restore, or remodel a given structure or dwelling, even though these activities may incidentally result in a reduction or elimination of lead-based paint hazards.” [40 CFR 745.223]

Action Level: Employee exposure, without regard to the use of respirators, to an airborne concentration of lead in micrograms per cubic meter of air ($\mu\text{g}/\text{m}^3$) calculated as an eight hour time-weighted average (TWA). The action level for lead is 30 $\mu\text{g}/\text{m}^3$.

Permissible Exposure Limit: Employee exposure, the maximum exposure level to an airborne concentration of lead in micrograms per cubic meter of air ($\mu\text{g}/\text{m}^3$) calculated as an eight hour time-weighted average (TWA). The PEL for lead is 50 $\mu\text{g}/\text{m}^3$.

LEAD POISONING

Environmental Intervention Blood Lead Level: The level of lead in blood that requires intervention in a child under age six. This is defined as a blood lead level of 20 µg/dL (micrograms per deciliter) of whole blood or above for a single test, or blood lead levels of 15-19 µg/dL in two tests taken at least three months apart.

Lead: The word "lead" when used in these projects means elemental lead, all inorganic lead compounds and a class of organic lead compounds called lead soaps. Lead is a heavy metal at room temperature and pressure and is a basic chemical element. It can combine with various other substances to form lead compounds.

KEY UNITS OF MEASUREMENT

µg (Microgram): A microgram is 1/1000th of a milligram (or one millionth of a gram).

*To put this unit into perspective, a penny weighs 2 grams. To get a microgram, you would need to divide the penny into 2 million pieces. A microgram is one of those two million pieces.

ft² (Square foot): One square foot is equal to an area that has a length of one foot (12 inches) and a width of one foot (12 inches).

µg/dL: Micrograms per deciliter used to measure the level of lead in children's blood to establish whether intervention is needed. A deciliter (1/10th of liter) is a little less than half a cup.

*As noted above, a microgram is the same weight as one penny divided into two million parts.

µg/gram: Micrograms per gram of sample, equivalent to parts per million (ppm) by weight. Used to measure lead in soil.

µg/ft²: Micrograms per square feet is the measurement used to measure levels of lead in dust samples. The clearance report should have the dust sampling results listed in µg/ft² (micrograms per square foot).

mg/cm²: Milligrams per square centimeter. Used to measure lead in paint.

percent: Percent by weight, used usually for lead-based paint (1 percent = 10,000 µg/gram)

ppm: Parts per million by weight, equivalent to µg/gram (10,000 ppm = 1 percent). Used to measure lead in paint and soil.

LEAD-BASED PAINT STANDARDS

Paint – Definition of Lead-Based Paint

Paint coating that contains at least:

- 1 mg/cm² of lead (HUD);
- 0.5 percent lead; or 5,000 parts per million lead by dry weight.

Paint – Definition of Lead-Containing Paint

Paint coating that contains at least:

- Any amount above 0.0 mg/cm² of lead (OSHA);

* In 1978 the Consumer Product Safety Commission banned the residential use of lead-based paint that contained greater than or equal to 0.06 percent or 600 ppm of lead.

Dust – Federal Thresholds for Lead-Contamination (Risk Assessment/Clearance)

- Floors 40 µg/ft²
- Interior window sills 250 µg/ft²
- Window troughs (Clearance only) 400 µg/ft²

Soil – Federal Thresholds for Bare Soil Contamination

- Play areas used by children under age 6 400 µg/gram
- Other areas, if more than 9ft² in total area of bare soil per property 2,000 µg/gram
- Abatement required by HUD 5,000 µg/gram

LIST OF ACRONYMS

AIHA:	American Industrial Hygiene Association
AL:	Action Level
ANSI:	American National Standards Institute
ASA:	American Standards Association
ASTM:	American Society for Testing & Materials
CFR:	Code of Federal Regulations
CERCLA:	Comprehensive Environmental Response, Compensation & Liability Act (42 USC 9601ff)
CIH:	Certified Industrial Hygienist
DOT:	U.S. Department of Transportation
EPA:	U.S. Environmental Protection Agency
FR:	Federal Register
GFCI:	Ground Fault Circuit Interrupter
GISO:	General Industry Safety Orders
HEPA:	High Efficiency Particulate Air (filter with 99.97% efficiency to 0.3 microns)
HVAC:	Heating, ventilation and air conditioning system
HUD:	U.S. Department of Housing and Urban Development
IH:	Industrial Hygienist
LBP:	Lead-Based Paint
LCP:	Lead-Containing Paint
OSHA:	Occupational Safety and Health Administration
PEL:	Permissible Exposure Limit
NAM:	Negative Air (Filtration) Machine
NEA:	Negative Exposure Assessment
NEC:	National Electrical Code
NESHAPS:	National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61 M)
NFPA:	National Fire Protection Association
NIOSH:	National Institute of Occupational Safety and Health
PAPR:	Powered Air-Purifying Respirator
PEL:	Permissible Exposure Limit
RCRA:	Resource Conservation and Recovery Act
SDS:	Safety Data Sheet
TWA:	Time Weighted Average
XRF:	X-ray Fluorescence



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September 23, 2022

Mr. Matt Smith
Land Development Manager
419 Fulton Street
Peoria, IL 61602

**Subject: NORM, Metals, and PCB Sampling Results
Former Harrison School, 2702 West Krause Avenue, Peoria, Illinois 61605
Former McKinley School, 1201 West Adrian G. Hinton Avenue, Peoria, Illinois 61605**

Dear Mr. Smith:

Wood Environment & Infrastructure Solutions, Inc. (Wood) has prepared this letter to report to the City of Peoria (the City) on additional testing completed for naturally occurring radioactive materials (NORM) concentrated in ceramic brick or other building materials, toxicity characteristic leaching procedure (TCLP) Resource Conservation and Recovery Act (RCRA) metals in paint, and polychlorinated biphenyls (PCBs) in paint and caulk. This sampling was completed in an effort to better define the impact that regulated materials will have on the scope of work for the upcoming demolition of the former Harrison School and former McKinley School.

BACKGROUND INFORMATION

The City wishes to procure a contractor for the asbestos abatement and demolition of the following former elementary schools located in residential areas of the City, which the City now owns:

- Former Harrison School, located at 2702 West Krause Avenue
- Former McKinley School, located at 1201 West Adrian G. Hinton Avenue

To date the City has had Phase I Environmental Site Assessments performed for each property, and has also had asbestos, lead based paint (LBP), and hazardous materials surveys completed for the structures. Both the Phase I's and the asbestos, LBP and hazardous materials surveys were performed by Stantec. During a site walk at the schools to define the abatement and demolition work, Wood noted that there were additional potential regulated materials present that were not previously assessed which could have a significant impact on scope and pricing for the demolition work, specifically the potential presence of NORM, PCBs, and metals in building materials. In order to determine the extent of the impact of the regulated materials on the project scope and pricing, the City requested that Wood perform additional sampling. Discussed below are each of the sampling tasks and the results obtained.

NATURALLY OCCURRING RADIOACTIVE MATERIALS

Building materials such as boiler liner fire brick, granite, ceramic tiles, glazed brick or terra cotta, are occasionally found to contain NORM in concentrations that limit disposal facilities that can be utilized to



dispose the waste. Wood collected samples of building materials at both schools to determine if special disposal would be needed for potential NORM containing building materials.

At Harrison School, glazed brick in two different styles is present on the façade. Wood proposed taking three representative samples of each brick style (total of six samples). Ceramic tiles line the lower walls of each restroom. Wood proposed taking six total samples from the three restroom areas identified in the Stantec report. As proposed, Wood obtained three representative samples of each type from the façade (white and brown glazed) and two samples from each of the three restrooms in the building, identified by Wood as the northwest restroom, southeast restroom and southwest restroom.

McKinley School contains a boiler and the Stantec Report inspection identified five locations where ceramic tiles are present. Wood proposed obtaining three samples of fire brick, if it was present and accessible in the boiler, and five samples, one from each location, of the ceramic tiles. Wood was only able to obtain one sample of the brick from the boiler but was able to obtain all 5 planned samples of ceramic tile.

Samples were sent to Eurofins St. Louis to be analyzed for Ra-226 and other gamma emitters by United States Environmental Protection Agency (USEPA) method 901.1. Method 901.1 provides an estimation to provide a preliminary determination of if they are NORM. Ra-226 by gamma spectroscopy is typically determined by inference from daughters (e.g. Bi-214) after sealing the sample in an appropriate counting geometry/container and waiting 21 days to allow the Ra-226 decay chain through Rn-222 to reach secular equilibrium. Such an approach is considered to be the most reliable and representative means for establishing the true Ra-226 concentration in the sample.

The alternative method used by Eurofins at Wood's request to report Ra-226, using its own 186 keV gamma-ray emission, is subject to interference and potential bias due to the 185.7 keV U-235 gamma ray. Experience also indicates gamma spectroscopy software does not consistently assign accurate peak areas to Ra-226 (186 keV), with the problem compounded by slight drift of the instrumentation. The laboratory considers Ra-226 reported based upon the 186 keV gamma-ray emission to be best used in a qualitative fashion. Wood therefore considered the data reported based on USEPA method 901.1 to be an estimation and treated it appropriately.

Table 1 summarizes the results and the laboratory report is provided in Attachment A. At Harrison School, detected concentrations NORM were all below 20 pCi/g and radium concentrations were generally less than 10 pCi/g (one at 13.1 pCi/g). At McKinley School, detected concentrations of NORM were all below 20 pCi/g and radium concentrations were generally less than 10 pCi/g.

Based on the results of the sampling, Wood consulted with the Illinois Emergency Management Agency which governs radioactive materials disposal in Illinois and obtained a letter indicating that the building materials may be safely landfilled with no restrictions. This letter is included in Attachment A.

PCBS IN CAULK

Exterior window caulk at Harrison School was tested and was non-detect for asbestos during the Stantec hazardous materials assessment. However, the caulk was not analyzed for PCBs, which was frequently added to keep the caulk flexible. According to the USEPA, there was potentially widespread use of PCB-containing caulk in schools and other buildings built or renovated between about 1950 and 1979. Wood proposed to take four caulk samples at each school (although the Stantec report did not identify caulk as being present at McKinley School, Wood planned to sample



it if it was present). No caulk samples could be collected at McKinley as no caulk was observed at ground level at the McKinley School. Four caulk samples were taken at Harrison School and sent to Eurofins Chicago to be analyzed for PCBs.

Table 2 summarizes the PCB in caulk analytical results and the laboratory report is provided in Attachment B. Low concentrations of PCBs at 10 milligrams per kilogram (mg/kg), or parts per million (ppm), and under were detected in the caulk. The Toxic Substances Control Act (TSCA) regulations contained in 40 Code of Federal Regulation (CFR) 761 provide disposal and cleanup requirements for PCBs. Materials containing PCBs at less than 50 ppm are not regulated for storage and disposal under TSCA. Therefore, the caulk sampled at Harrison School is not a TSCA regulated waste.

If the building owner-operator finds PCBs in concentrations greater than 50 ppm or assumes they are present, the building materials are regulated and must be removed for disposal as PCB bulk product waste.

PCBs IN PAINT

According to the USEPA, PCBs may have been intentionally added to some specialty paints and coatings to improve their performance for use primarily in industrial and/or military applications (e.g., paints manufactured to endure thermal stress, vibration or corrosivity) but such specialty paints or coatings could have been used in some schools and other buildings built or renovated between 1950 and 1979. Therefore, Wood proposed to collect paint samples at the schools to be analyzed for PCBs. Based on the inspection/lead testing by Stantec, Wood identified an estimated ten different paint colors at the Harrison School and an estimated 15 different colors at the McKinley School. One sample was to be taken of each paint color (considered representative of homogenous units) and sent to Eurofins Chicago to be analyzed for PCBs.

Nine paint samples (beige, brown, yellow, white, gray, blue, green, red and black) were obtained from Harrison School. Fifteen paint samples (light green, white, yellow, beige, dark green, green, red, pink, light blue, dark blue, gray, white, light purple, dark purple, and brown) were obtained from McKinley School. Black paint was present on the floor at one location in McKinley School and it was missed and not sampled. Most painted surfaces within the schools were noted to be peeling to some degree, with some colors peeling more substantially. Where paint is peeling, it is expected that paint chips are present on the floor (this was observed) and potentially comingled with debris present in many areas. Debris on the floor was not disturbed due to the potential presence of asbestos-containing materials comingled in the debris.

Table 3 summarizes the detected concentrations of PCBs in the paint samples and Attachment C contains the laboratory report. PCB concentrations in paint at Harrison School ranged from 0.96 mg/kg to 50 mg/kg. Only brown paint was at 50 mg/kg. The brown paint is present mainly on wood components such as doors, door frames, and baseboards although some is on plaster.

PCB concentrations in paint at McKinley School ranged from 9 mg/kg to 110 mg/kg. Green and dark green paint occurring mainly together on upper and lower plaster walls had detected concentrations of 67 mg/kg and 96 mg/kg, respectively. Light purple and dark purple paint occurring mainly together on upper and lower plaster walls both had detected concentrations of 110 mg/kg. Brown paint, occurring mainly on ceramics, wood, block and metal, had a detected concentration of 72 mg/kg PCBs.



Paint with PCBs at or greater than 50 ppm that is adhered to the substrate (e.g., plaster wall, wood molding, etc.) can be disposed as PCB bulk product. In order to be disposed of as PCB bulk product, the paint and underlying building material must be disposed of together. PCB bulk product can be disposed at facility permitted, licensed, or registered by a State as a municipal or non-municipal non-hazardous waste landfill.

Prior to removal of the PCB bulk product, damaged and peeling paint must be removed. Damaged and peeling paint with PCBs at concentrations at and greater than 50 ppm must be collected separately. This waste stream is considered PCB remediation waste and must be disposed at a TSCA landfill. Fallen paint chips on surfaces (ground, piping, etc.) with PCB concentrations at or greater than 50 ppm is a TSCA waste. Therefore, all debris on the floor where PCB-containing paint with concentrations at or greater than 50 ppm is commingled must be collected separately and disposed as TSCA waste.

METALS IN PAINT

Based on the inspection/lead testing by Stantec, there were six different paint colors that were positive for lead, based on X-ray fluorescence (XRF) testing, at Harrison School. Wood collected one composite sample of the six paint colors and analyzed by the Toxicity Characteristic Leaching Procedure (TCLP) for the eight RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver). The Stantec report identified only glazed ceramic tile in five locations as positive for lead at McKinley School. Wood collected one composite sample at each of the glazed tile locations and tested the glaze by TCLP for the eight RCRA metals. Samples were sent to Eurofins Chicago for analysis.

The laboratory report for these samples is provided in Attachment C. In the composite sample from Harrison School, arsenic, barium, cadmium, chromium, lead and mercury were detected. Arsenic, barium, cadmium and chromium were all detected at concentrations that were less than the RCRA toxicity characteristic for hazardous waste. However, mercury and lead were detected at concentrations of 0.34 milligrams per liter (mg/L) and 17 mg/L respectively, exceeding their respective RCRA toxicity characteristic for hazardous waste criteria of 0.2 mg/L and 5 mg/L. Based upon these results, paint that is not firmly adhered to a substrate must be disposed of as hazardous waste. However, some of the locations identified as having LBP in X-ray fluorescence (XRF) testing had very high concentrations (i.e. yellow paint on one windowsill tested at 37 ppm by XRF) compared to the other paints. Additional testing may be able to differentiate which paint is resulting in the hazardous by toxicity determination.

In the composite sample from the McKinley ceramic coatings which were positive for lead according to the Stantec report, only barium was detected above the laboratory detection limit at a low concentration. These tiles, if the glaze is still adhered and not peeling, may be disposed as construction debris.

Building materials with lead paint if adhered to the substrate can be whole component disposed as construction debris. Peeling paint and paint chips would need to be collected and disposed appropriately. Further testing of individual paint samples would be required to determine disposal options for lead paint chips and peeling paint which must be removed, collected, characterized, and disposed. There is a potential that the collected peeled paint will require disposal as hazardous waste.

CONCLUSIONS

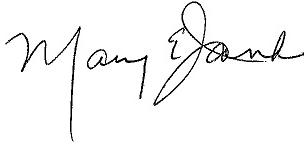
The sampling assessment conducted at the two former schools did not identify NORM or PCBs in caulk that will require special handling as part of demolition and disposal activities. However, at the former Harrison School, the sampling has identified PCBs in brown painted surfaces and lead



and mercury in other paints that will require management as TSCA regulated waste and/or RCRA hazardous waste. At the former McKinley School, several paint colors contain regulated concentrations of PCBs that will require management as TSCA regulated waste.

Please let us know of any further questions or concerns regarding this testing and results.

Sincerely,
Wood Environment & Infrastructure Solutions, Inc.



Mary E. Jank, PG
Sr. Associate Geologist



Keith B. Kotimko
Sr. Associate Construction Manager



Michael J. Hoffman, PE (IL)
Sr. Principal Environmental Engineer



TABLES



TABLE 1
 NORM SAMPLING
 Former Harrison and McKinley Schools
 The City of Peoria

Sample ID		East Brown Brick	Count Uncertainty	Total Uncertainty	South Brown Brick	Count Uncertainty	Total Uncertainty	West Brown Brick	Count Uncertainty	Total Uncertainty
Sample Date	Units	8/17/22			8/17/22			8/17/22		
Parameter										
Harrison School										
Radium- 226	pCi/g	5.76	2.15	2.25	8.6	2.03	2.52	0.00 U	1.92	1.92
Lead-210	pCi/g	-2.65 U	1.89	1.92	0.885 U	2.18	2.18	2.36	1.50	1.53
Thorium-232	pCi/g	2.73	0.353	0.449	2.44	0.308	0.396	2.99	0.430	0.558
Uranium-238	pCi/g	2.22	0.909	0.941	2.35	0.849	0.888	3.64	1.38	1.44
Radium-228	pCi/g	2.73	0.353	0.449	2.44	0.308	0.396	2.99	0.430	0.558
Bismuth-214	pCi/g	3.50	0.330	0.486	3.29	0.261	0.430	3.62	0.348	0.554
Actinium-227	pCi/g	0.847	0.646	0.652	0.762 U	0.885	0.889	-0.0788 U	0.163	0.164
Actinium-228	pCi/g	2.73	0.353	0.449	2.44	0.308	0.396	2.99	0.430	0.558
Bismuth-212	pCi/g	3.34	0.897	0.96	2.70	0.747	0.797	2.87	0.996	1.05
Lead-212	pCi/g	2.26	0.199	0.309	2.40	0.173	0.355	2.20	0.187	0.322
Lead-214	pCi/g	3.49	0.312	0.472	3.48	0.228	0.427	3.54	0.289	0.511
Potassium-40	pCi/g	4.67	1.09	1.19	3.33	0.936	0.996	4.06	0.940	1.06
Proactinium-231	pCi/g	1.24 U	4.00	4.00	1.09 U	4.55	4.56	-2.27 U	9.61	9.61
Thallium-208	pCi/g	0.872	0.150	0.175	0.787	0.102	0.13	0.854	0.154	0.184
Thorium-234	pCi/g	2.22	0.909	0.941	2.35	0.849	0.888	3.64	1.38	1.44
Uranium-235	pCi/g	-0.336 U	0.991	0.991	-0.319 U	0.858	0.858	0.389 U	0.337	0.34

Notes on last page

TABLE 1
 NORM SAMPLING
 Former Harrison and McKinley Schools
 The City of Peoria

Sample ID		East White Brick	Count Uncertainty	Total Uncertainty	South White Brick	Count Uncertainty	Total Uncertainty	West White Brick	Count Uncertainty	Total Uncertainty
Sample Date Parameter	Units	8/17/22			8/17/22			8/17/22		
Harrison School										
Radium- 226	pCi/g	6.59	2.39	2.54	13.1	2.97	3.42	9.82	2.44	2.98
Lead-210	pCi/g	-2.09 U	2.01	2.03	5.82	2.79	2.88	3.77	1.82	1.87
Thorium-232	pCi/g	2.40	0.435	0.520	3.09	0.417	0.556	2.66	0.386	0.472
Uranium-238	pCi/g	3.59	1.57	1.63	7.67	1.99	2.19	3.60	0.849	0.939
Radium-228	pCi/g	2.40	0.435	0.520	3.09	0.417	0.556	2.66	0.386	0.472
Bismuth-214	pCi/g	2.92	0.303	0.461	6.76	0.497	0.945	3.93	0.282	0.497
Actinium-227	pCi/g	0.611 U	0.807	0.810	0.939 U	2.31	2.32	-0.0410 U	0.0711	0.0713
Actinium-228	pCi/g	2.40	0.435	0.520	3.09	0.417	0.556	2.66	0.386	0.472
Bismuth-212	pCi/g	3.95	1.11	1.20	3.17	1.32	1.37	2.92	0.772	0.829
Lead-212	pCi/g	1.91	0.196	0.300	2.56	0.246	0.392	2.27	0.179	0.344
Lead-214	pCi/g	3.1	0.258	0.450	6.29	0.410	0.854	4.13	0.245	0.494
Potassium-40	pCi/g	3.52	0.878	0.973	0.649 U	1.65	1.66	2.92	0.732	0.790
Proactinium-231	pCi/g	-2.85 U	9.92	9.93	-1.91 U	12.6	12.6	0.403 U	2.68	2.68
Thallium-208	pCi/g	0.849	0.138	0.171	0.978	0.177	0.212	0.849	0.131	0.158
Thorium-234	pCi/g	3.59	1.57	1.63	7.67	1.99	2.19	3.60	0.849	0.939
Uranium-235	pCi/g	0.112 U	0.223	0.224	0.309 U	0.638	0.639	-0.375 U	0.517	0.518

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TABLE 1
 NORM SAMPLING
 Former Harrison and McKinley Schools
 The City of Peoria

Sample ID		NW Restroom East Wall	Count Uncertainty	Total Uncertainty	NW Restroom North Wall	Count Uncertainty	Total Uncertainty	SW Restroom North Wall	Count Uncertainty	Total Uncertainty
Sample Date Parameter	Units	8/17/22			8/17/22			8/17/22		
Harrison School										
Radium- 226	pCi/g	6.08	2.25	2.36	3.92	1.58	1.73	4.63	2.21	2.29
Lead-210	pCi/g	3.06 U	2.89	2.91	2.13 U	1.67	1.69	1.98 U	2.77	2.78
Thorium-232	pCi/g	2.98	0.408	0.507	2.13	0.280	0.354	2.59	0.385	0.493
Uranium-238	pCi/g	1.23 U	1.27	1.28	1.14 U	0.917	0.926	2.54 U	1.69	1.71
Radium-228	pCi/g	2.98	0.408	0.507	2.13	0.280	0.354	2.59	0.385	0.493
Bismuth-214	pCi/g	2.28	0.310	0.387	1.96	0.277	0.344	2.12	0.300	0.392
Actinium-227	pCi/g	0.311 U	1.08	1.080	0.223 U	0.827	0.828	1.05 U	1.86	1.86
Actinium-228	pCi/g	2.98	0.408	0.507	2.13	0.280	0.354	2.59	0.385	0.493
Bismuth-212	pCi/g	0.952 U	1.69	1.70	3.50	0.828	0.904	3.75	1.17	1.25
Lead-212	pCi/g	2.74	0.249	0.380	2.41	0.186	0.363	2.26	0.222	0.349
Lead-214	pCi/g	2.58	0.290	0.391	2.04	0.206	0.295	2.03	0.278	0.368
Potassium-40	pCi/g	19.3	2.33	3.04	15.9	1.70	2.35	15.2	2.250	2.890
Proactinium-231	pCi/g	-1.65 U	6.33	6.33	1.11 U	4.35	4.35	2.22 U	9.65	9.65
Thallium-208	pCi/g	0.857	0.154	0.177	0.849	0.131	0.158	0.870	0.158	0.159
Thorium-234	pCi/g	1.23 U	1.27	1.28	1.14 U	0.917	0.926	2.54 U	1.69	1.71
Uranium-235	pCi/g	0.242 U	0.477	0.478	-0.296 U	0.435	0.436	0.315 U	0.792	0.793

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TABLE 1
 NORM SAMPLING
 Former Harrison and McKinley Schools
 The City of Peoria

Sample ID		SW Restroom West Wall	Count Uncertainty	Total Uncertainty	SE Restroom North Wall	Count Uncertainty	Total Uncertainty	SE Restroom West Wall	Count Uncertainty	Total Uncertainty
Sample Date Parameter	Units	8/17/22			8/17/22			8/17/22		
Harrison School										
Radium- 226	pCi/g	4.55	1.79	1.96	6.19	2.71	2.8	3.43	1.49	1.61
Lead-210	pCi/g	-1.47 U	1.45	1.46	4.53	3.7	3.74	1.21 U	2.36	2.37
Thorium-232	pCi/g	1.82	0.278	0.334	2.56	0.485	0.550	2.16	0.313	0.383
Uranium-238	pCi/g	2.27	0.860	0.896	1.80 U	1.34	1.36	2.17	0.816	0.851
Radium-228	pCi/g	1.82	0.278	0.334	2.56	0.485	0.550	2.16	0.313	0.383
Bismuth-214	pCi/g	1.79	0.271	0.329	2.59	0.352	0.440	1.87	0.252	0.319
Actinium-227	pCi/g	0.500 U	1.06	1.060	0.714 U	1.35	1.35	0.214 U	0.352	0.353
Actinium-228	pCi/g	1.82	0.278	0.334	2.56	0.485	0.550	2.16	0.313	0.383
Bismuth-212	pCi/g	0.325 U	1.25	1.25	0.961 U	1.77	1.77	3.02	1.18	1.22
Lead-212	pCi/g	1.87	0.182	0.303	2.87	0.263	0.398	2.26	0.193	0.351
Lead-214	pCi/g	1.77	0.189	0.264	2.31	0.302	0.382	2.01	0.198	0.287
Potassium-40	pCi/g	15.5	1.86	2.45	14.3	2.07	2.52	13.2	1.65	2.130
Proactinium-231	pCi/g	-1.49 U	5.14	5.15	0.000 U	0.940	0.940	0.000 U	0.640	0.640
Thallium-208	pCi/g	0.57	0.117	0.131	1.06	0.168	0.200	0.877	0.142	0.169
Thorium-234	pCi/g	2.27	0.860	0.896	1.80 U	1.34	1.36	2.17	0.816	0.851
Uranium-235	pCi/g	0.264 U	0.513	0.513	-0.457 U	1.37	1.37	-0.0326 U	0.548	0.549

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TABLE 1
NORM SAMPLING
Former Harrison and McKinley Schools
The City of Peoria

Sample ID		Boiler Door Liner	Count Uncertainty	Total Uncertainty	2nd Floor Hall N-Wall, East End	Count Uncertainty	Total Uncertainty	2nd Floor Hall S-Wall, West End	Count Uncertainty	Total Uncertainty
Sample Date	Units	8/17/22			8/17/22			8/17/22		
Parameter										
McKinley School										
Radium- 226	pCi/g	-0.130 U	3.72	3.72	4.73	1.69	1.88	5.59	2.09	2.19
Lead-210	pCi/g	-5.72 U	5.67	5.71	-0.138 U	1.34	1.34	2.26 U	2.53	2.55
Thorium-232	pCi/g	0.510	0.349	0.354	1.83	0.352	0.399	2.24	0.379	0.442
Uranium-238	pCi/g	3.42 U	2.72	2.75	1.76	0.856	0.878	0.561 U	0.898	0.900
Radium-228	pCi/g	0.510	0.349	0.354	1.83	0.352	0.399	2.24	0.379	0.442
Bismuth-214	pCi/g	0.0940 U	0.591	0.591	1.61	0.239	0.291	1.79	0.274	0.329
Actinium-227	pCi/g	1.61	0.914	0.934	-0.0191 U	0.122	0.122	0.366 U	1.02	1.02
Actinium-228	pCi/g	0.510	0.349	0.354	1.83	0.352	0.399	2.24	0.379	0.442
Bismuth-212	pCi/g	-0.0425 U	4.90	4.90	0.594 U	1.10	1.10	2.44	0.926	0.959
Lead-212	pCi/g	0.0222 U	0.349	0.349	1.67	0.168	0.274	1.97	0.214	0.297
Lead-214	pCi/g	0.934	0.251	0.274	1.69	0.201	0.266	1.81	0.263	0.321
Potassium-40	pCi/g	13.7	3.41	3.78	13.9	1.77	2.27	18.4	2.290	2.950
Proactinium-231	pCi/g	3.23 U	10.50	10.50	-1.25 U	4.39	4.40	1.18 U	3.73	3.73
Thallium-208	pCi/g	0.0781 U	0.142	0.142	0.635	0.110	0.128	0.648	0.16	0.173
Thorium-234	pCi/g	3.42 U	2.72	2.75	1.76	0.856	0.878	0.561 U	0.898	0.900
Uranium-235	pCi/g	-0.783 U	1.56	1.56	-0.328 U	0.408	0.409	-0.395	1.16	1.16

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TABLE 1
 NORM SAMPLING
 Former Harrison and McKinley Schools
 The City of Peoria

Sample ID		1st Floor Hall S-Wall, West End	Count Uncertainty	Total Uncertainty	1st Floor Hall N-Wall, East End	Count Uncertainty	Total Uncertainty	Gym, East of Stage	Count Uncertainty	Total Uncertainty
Sample Date Parameter	Units	8/17/22			8/17/22			8/17/22		
McKinley School										
Radium- 226	pCi/g	0.000 U	1.70	1.70	0.000 U	2.34	2.34	0.176 U	2.19	2.19
Lead-210	pCi/g	-1.31 U	2.82	2.83	1.06 U	2.04	2.04	-1.33 U	3.21	3.21
Thorium-232	pCi/g	1.68	0.273	0.323	1.88	0.291	0.367	2.04	0.583	0.631
Uranium-238	pCi/g	1.10 U	0.783	0.793	2.98 U	1.48	1.52	2.67 U	1.86	1.88
Radium-228	pCi/g	1.68	0.273	0.323	1.88	0.291	0.367	2.04	0.583	0.631
Bismuth-214	pCi/g	1.52	0.201	0.255	1.77	0.303	0.368	2.03	0.339	0.416
Actinium-227	pCi/g	0.451 U	0.944	0.946	0.554 U	1.23	1.24	0.559 U	0.853	0.856
Actinium-228	pCi/g	1.68	0.273	0.323	1.88	0.291	0.367	2.04	0.583	0.631
Bismuth-212	pCi/g	3.09	0.847	0.906	0.952 U	1.51	1.51	2.79	1.10	1.15
Lead-212	pCi/g	1.60	0.163	0.264	1.74	0.193	0.283	1.84	0.222	0.312
Lead-214	pCi/g	1.70	0.179	0.252	1.66	0.209	0.287	1.78	0.248	0.326
Potassium-40	pCi/g	15.1	1.82	2.39	15.3	1.83	2.58	16.2	2.11	2.860
Proactinium-231	pCi/g	-1.13 U	4.06	4.06	1.71 U	4.70	4.710	-3.34 U	10.1	10.2
Thallium-208	pCi/g	0.466	0.103	0.114	0.606	0.102	0.125	0.669	0.146	0.166
Thorium-234	pCi/g	1.10 U	0.783	0.793	2.98 U	1.48	1.52	2.67 U	1.86	1.88
Uranium-235	pCi/g	0.0475 U	0.0939	0.094	0.353 U	1.10	1.10	-0.440 U	0.745	0.747

pCi/g
 Bold

pico curie per gram
 Detected concentration

prepared by MEJ 9/11/2022
 checked by CTC 9/22/2022

TABLE 2
 CAULK for PCBs
 Former Harrison School
 The City of Peoria

Sample ID		Northeast Caulk	North Caulk	West Caulk	South Caulk
Sample Date		8/17/22	8/17/22	8/17/22	8/17/22
Parameter	Units				
Harrison School					
PCB-1016	mg/kg	<0.23	<0.22	<1.9	<0.17
PCB-1221	mg/kg	<0.23	<0.22	<1.9	<0.17
PCB-1232	mg/kg	<0.23	<0.22	<1.9	<0.17
PCB-1242	mg/kg	<0.23	<0.22	<1.9	<0.17
PCB-1248	mg/kg	2.1	1.2	10	1.3
PCB-1254	mg/kg	<0.23	<0.22	<1.9	<0.17
PCB-1260	mg/kg	<0.23	<0.22	<1.9	<0.17

Notes:

PCB	polychlorinated biphenyls		
mg/kg	milligrams per kilogram	prepared by: MEJ	9/11/2022
Bold	Detected concentration	checked by: CTC	9/22/2022

TABLE 3
PCB IN PAINT SAMPLING
Former Harrison and McKinley Schools
The City of Peoria

Sample ID	Sample Date	Units	Beige North Foyer 8/22/22	Brown SW Doorframe 8/22/22	Yellow NW Basement Hall 8/22/22	White West Basement Room 8/22/22	Grey North Basement Room 8/22/22	Blue SE Basement RR 8/22/22	Green NE Classroom 1st flr 8/22/22	Red 3rd Floor Cloakroom 8/22/22	Black NW Stairs Handrail 8/22/22
Harrison School											
PCB-1016		mg/kg	<0.13	<8.9	<2.1 F1	<0.4	<2.0	<1.8	<0.48	<0.79	<1.3
PCB-1221		mg/kg	<0.13	<8.9	<2.1	<0.4	<2.0	<1.8	<0.48	<0.79	<1.3
PCB-1232		mg/kg	<0.13	<8.9	<2.1	<0.4	<2.0	<1.8	<0.48	<0.79	<1.3
PCB-1242		mg/kg	<0.13	<8.9	<2.1	<0.4	<2.0	<1.8	<0.48	<0.79	<1.3
PCB-1248		mg/kg	<0.13	<8.9	<2.1	<0.4	<2.0	<1.8	<0.48	<0.79	<1.3
PCB-1254		mg/kg	0.96	50	14	2.2	15	14	3.9	3.8	7.7
PCB-1260		mg/kg	<0.13	<8.9	<2.1 F1	<0.4	<2.0	<1.8	<0.48	<0.79	<1.3
Locations of Identified Surface Color Paint from the Pre-Demolition Site Characterization: Asbestos-Containing Materials, Lead-Bearing Paint and Regulated Hazardous Building Material Inventory Survey was performed in March 2022			1901 basement east stairwell upper (plaster), 1901 basement northeast corner wall (plaster), 1901 basement northwest corner wall (brick), 1901 basement southeast bathroom wall (brick), 1901 basement southeast storage upper wall (plaster), 1901 basement east foyer wall (plaster), 1901 basement east foyer ceiling (plaster), 1901 basement west foyer wall (plaster), 1901 basement west side northwest room wall (brick), 1901 basement west side kitchen wall (plaster), 1901 basement west side storage chair rail (wood), 1901 basement west side storage wall (plaster), 1901 1st floor northeast corner classroom wall (plaster), 1901 1st floor northeast corner coat room wall (plaster), 1901 1st floor teachers workroom lower and upper walls (plaster), 1901 1st floor northwest classroom upper and lower walls (plaster), 1901 1st floor northwest classroom wall frame (wood), 1901 1st floor southwest classroom upper and lower walls (plaster), 1901 1st floor south center classroom upper and lower walls (plaster), 1901 1st floor southeast classroom upper and lower walls and ceiling (plaster), 1901 1st floor foyer upper and lower walls (plaster), 1901 1st floor foyer ceiling (plaster), 1901 1st floor foyer transom frame (wood), 1901 2nd floor east stairwell upper and lower walls (plaster), 1901 2nd floor northeast classroom upper and lower walls (plaster), 1901 2nd floor north stairwell room wall (plaster), 1901 2nd floor northwest classroom upper and lower walls (plaster), 1901 2nd floor southwest classroom lower wall (plaster), 1901 2nd floor south center classroom upper and lower walls (plaster), 1901 2nd floor foyer upper and lower walls (plaster), 1922 ground gymnasium trim (wood), 1922 ground gymnasium upper wall (block), 1922 ground gymnasium upper wall (plaster), 1922 ground gymnasium ceiling (plaster), 1922 ground stage south storage (plaster), 1922 1st floor east hallway wall (plaster), 1922 1st floor west stairwell area wall (plaster), 1922 1st floor east hallway (plaster), 1922 2nd floor south center room wall (plaster), 1922 2nd floor east hall southwest classroom walls (plaster), 1922 2nd floor east hall (plaster), 1922 3rd floor northwest stairwell walls (plaster), 1922 3rd floor northwest bathroom walls (plaster), 1922 3rd floor east hall southwest classroom walls (plaster), 1922 3rd floor east hall wall (plaster), 1922 3rd floor east hall closet door casing (wood), 1922 3rd floor south hallway upper walls (plaster), 1949 1st floor west center classroom walls (plaster), 1949 1st floor west center classroom wall (ceramic), 1949 1st floor southwest classroom (plaster), 1949 1st floor south hallway wall (ceramic), 1949 1st floor south hallway wall (block), 1949 1st floor south hallway wall (plaster), 1949 1st floor south hallway ceiling (plaster)	1901 basement east stairwell lower (plaster), 1901 basement east stairwell chair rail (wood), 1901 basement east stairwell post (wood), 1901 basement east stairwell window frame (wood), 1901 basement northeast corner door surface (wood), 1901 basement southwest room door casing (wood), 1901 basement southeast storage chair rail (wood), 1901 basement southeast storage lower wall (plaster), 1901 basement east foyer door casing (wood), 1901 basement west foyer window frame (wood), 1901 1st floor northwest room baseboard (wood), 1901 1st floor northwest classroom baseboard (wood), 1901 2nd floor north stair well room window frame (wood), 1901 2nd floor south center classroom door casing (wood), 1922 ground stage archway base (plaster), 1922 ground north stage runway wall (plaster), 1922 1st floor north center bathroom partition wall (metal), 1922 2nd floor west stairwell (plaster), 1922 3rd floor northwest bathroom stall wall (wood), 1922 3rd floor room 302 door surface (wood), 1922 3rd floor south hallway lower walls (plaster), 1949 1st floor south hallway door surface (wood)	1901 1st floor teachers workroom window sill (wood)	1901 basement southwest room wall (plaster), 1901 basement west side bathroom wall (block), 1901 2nd floor northwest classroom closet walls (plaster), 1901 2nd floor northwest classroom ceiling (plaster), 1901 2nd south center classroom ceiling (plaster), 1922 1st floor northwest room wall (plaster), 1922 2nd floor east hall south center classroom door surface (wood), 1922 2nd floor east hall gym archway (plaster), 1922 3rd floor northwest bathroom wall (plaster)	1901 basement northwest corner floor (concrete), 1901 basement west side northwest room wall (brick), 1901 basement west side bathroom wall (plaster), 1901 1st floor northeast corner classroom pipe chase wall (plaster), 1901 3rd foyer ibeam (steel), 1922 ground southeast bathroom wall (plaster), 1901 2nd floor north stairwell wall (plaster),	1901 basement west side south storage wall (wood), 1901 1st floor northwest room walls (plaster), 1901 3rd floor foyer walls (plaster), 1922 1st floor north center bathroom wall (ceramic), 1922 1st floor northeast bathroom wall (ceramic), 1922 2nd floor west center room (plaster), 1922 2nd floor east hall southwest classroom trim (wood), 1922 1st floor west side storage wall (wood), 1949 1st floor southwest classroom wall closet (plaster)	1922 3rd floor east hall south center classroom walls (plaster)	1901 1st floor foyer floor casing (wood), 1922 3rd floor northwest stairwell handrail and rail cap (wood), 1949 1st floor south hallway door casing (wood)	

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TABLE 3
PCB IN PAINT SAMPLING
Former Harrison and McKinley Schools
The City of Peoria

Sample ID	Sample Date	Units	Light Green SE Room 8/22/22	White Kitchen Duct 8/22/22	Yellow Foyer Hall 8/22/22	Beige Foyer Hall 8/22/22	Dark Green Lower Wall 8/22/22	Green Upper Wall 8/22/22	Red Lower Wall 8/22/22	Pink Upper Wall 8/22/22
McKinley School										
PCB-1016		mg/kg	<2.2	<9.8	<6.7	<9.3	<21	<18	<4.9	<4.2
PCB-1221		mg/kg	<2.2	<9.8	<6.7	<9.3	<21	<18	<4.9	<4.2
PCB-1232		mg/kg	<2.2	<9.8	<6.7	<9.3	<21	<18	<4.9	<4.2
PCB-1242		mg/kg	<2.2	<9.8	<6.7	<9.3	<21	<18	<4.9	<4.2
PCB-1248		mg/kg	<2.2	<9.8	<6.7	<9.3	<21	<18	<4.9	<4.2
PCB-1254		mg/kg	9.0	43	20	27	96	67	40	24
PCB-1260		mg/kg	<2.2	<9.8	<6.7	<9.3	<21	<18	<4.9	<4.2
Locations of Identified Surface Color Paint from the Pre-Demolition Site Characterization: Asbestos-Containing Materials, Lead-Bearing Paint and Regulated Hazardous Building Material Inventory Survey was performed in March 2022			1977 ground northwest classroom 1 upper wall (block), 1967 2nd floor northwest classroom 1 upper wall (block), 1967 2nd floor northwest classroom 1 lower wall (block)	1977 ground kitchen duct (metal), 1977 ground kitchen wall (block)	1977 ground gymnasium stage floor (wood), 1967 1st floor northeast classroom wall (block), 1967 1st floor foyer hallway upper wall (block), 1967 2nd floor foyer hallway upper wall (block), 1904 exterior wall (wood)	1977 1st floor foyer hallway upper wall (block), 1977 ground gymnasium door casing (metal), 1977 ground northwest classroom 2 door casing (metal), 1977 ground foyer hallway upper wall (block), 1977 ground northeast classroom door casing (metal), 1967 2nd floor northeast class door casing (metal), 1967 2nd floor southeast classroom (block), 1967 2nd floor foyer hallway door casing (metal)	1904 basement southwest foyer lower wall (plaster), 1977 ground northwest classroom 1 lower wall (block)	1904 basement southwest foyer upper wall (plaster), 1977 1st floor southwest room 2 wall (plaster), 1977 ground floor stage wall (block), 1967 2nd floor east center classroom wall (block)	1904 1st floor foyer floor (concrete), 1977 ground stage floor (wood), 1977 ground northeast classroom lower wall (block), 1967 exterior door surface (metal)	1977 ground northeast classroom upper wall (block), 1967 2nd floor northeast classroom 2 wall (block), 1967 exterior upper wall (brick), 1967 exterior lower wall (block), 1977 exterior upper wall (brick), 1977 exterior lower wall (brick)

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TABLE 3
PCB IN PAINT SAMPLING
Former Harrison and McKinley Schools
The City of Peoria

Sample ID	Sample Date	Units	Light Blue Upper Wall 8/22/22	Dark Blue Lower Wall 8/22/22	Grey Foyer 8/22/22	White Foyer 8/22/22	Light Purple Upper Wall 8/22/22	Dark Purple Lower Wall 8/22/22	Brown Basement Hall 8/23/22	Black No sample
McKinley School										
PCB-1016		mg/kg	<3.6	<3.7	<4.4	<2.6	<14	<20	<32	NS
PCB-1221		mg/kg	<3.6	<3.7	<4.4	<2.6	<14	<20	<32	NS
PCB-1232		mg/kg	<3.6	<3.7	<4.4	<2.6	<14	<20	<32	NS
PCB-1242		mg/kg	<3.6	<3.7	<4.4	<2.6	<14	<20	<32	NS
PCB-1248		mg/kg	<3.6	<3.7	<4.4	<2.6	<14	<20	<32	NS
PCB-1254		mg/kg	9.8	9.2	39	11	110	110	72	NS
PCB-1260		mg/kg	<3.6	<3.7	<4.4	<2.6	<14	<20	<32	NS
Locations of Identified Surface Color Paint from the Pre-Demolition Site Characterization: Asbestos-Containing Materials, Lead-Bearing Paint and Regulated Hazardous Building Material Inventory Survey was performed in March 2022			1904 basement bathroom upper wall (plaster), 1904 basement upper wall hallway (plaster), 1977 1st floor southwest room 1 upper wall (plaster), 1977 ground gymnasium upper wall (block), northeast classroom, 1967 1st floor east center classroom upper wall (block), 1967 2nd floor northeast classroom 1 upper wall (block)	1977 1st floor southwest room 1 lower wall (block), 1977 1st floor southwest room 1 closet door casing (metal), 1967 1st floor east center classroom lower wall (block), 1967 2nd floor northeast classroom 1 lower wall (block)	1904 basement AHU room duct (metal), 1904 1st floor foyer lower wall (plaster), 1904 1st floor north stairwell lower wall (plaster)	1904 1st floor foyer upper wall (plaster), 1904 1st floor north stairwell upper wall (plaster), 1977 1st floor southwest room 1 closet lower wall (block), 1977 1st floor southwest room 2 ceiling (concrete), 1967 2nd floor foyer hallway by elevator wall (block), 1967 2nd floor foyer hallway by elevator door frame (block)	1967 2nd floor northwest classroom 2 upper wall (block)	1967 2nd floor northwest classroom 2 lower wall (block)	1904 basement bathroom lower wall (plaster), 1904 basement lower wall hallway (plaster), 1904 basement stairwell wall (wood), 1977 1st floor southwest room 2 base wall (ceramic), 1977 1st floor foyer hallway lower wall (ceramic), 1977 ground gymnasium lower wall (ceramic), 1967 1st floor east center classroom base wall (ceramic), 1967 1st floor foyer hallway lower wall (block), 1967 2nd floor foyer hallway door surface (metal), 1967 2nd floor foyer hallway lower wall (block), 1967 2nd floor foyer hallway lower wall (ceramic)	1977 ground gymnasium stage floor (wood)

Notes:

PCB polychlorinated biphenyls
mg/kg milligrams per kilogram
Bold Detected concentration

prepared by MEJ 9/21/2022
checked by CTC 9/22/2022

ATTACHMENT A

**NORM LABORATORY REPORT
AND
IEMA LETTER**



ANALYTICAL REPORT

Eurofins St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

Laboratory Job ID: 160-46685-1

Client Project/Site: Building material (Firebrick, Ceramic)

For:

Wood E&I Solutions Inc
2412 W Nebraska
Peoria, Illinois 61604

Attn: Tom McNally

Rhonda Ridenhower

Authorized for release by:

8/30/2022 5:40:01 PM

Rhonda Ridenhower, Client Service Manager

Rhonda.Ridenhower@et.eurofinsus.com

Designee for

Ivan Vania, Project Manager II

(314)298-8566

Ivan.Vania@et.eurofinsus.com

LINKS

Review your project
results through



Have a Question?



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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Wood E&I Solutions Inc
Project/Site: Building material (Firebrick, Ceramic)

Job ID: 160-46685-1

Job ID: 160-46685-1

Laboratory: Eurofins St. Louis

Narrative

Job Narrative 160-46685-1

Receipt

The samples were received on 8/18/2022 8:50 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved. The temperature of the cooler at receipt was 22.4° C.

RAD

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

Gamma Prep Batch 579355

Many isotopes requested for analysis do not have any gamma emissions, or the gamma emissions they do have are very poor. Often, such analytes are reported by gamma spectrometry assuming secular equilibrium with a longer-lived parent. The client should ensure that such inference is acceptable for their sample based upon process knowledge. The following assumptions were made for this report:

Inferred from	Reported to Analyte
Th-234	Pa-234
Th-234	U-238
Pb-210	Po-210
Pb-210	Bi-210
Cs-137	Ba-137m
Pb-212	Po-216
Xe-131m	Xe-131
Sb-125	Te-125m
Ag-108m	Ag-108
Rh-106	Ru-106
Pb-212	Th-228
Pb-212	Ra-224
U-235	Th-231
Ac-228	Th-232
Ac-228	Ra-228
Th-227	Ra-223
Th-227	Ac-227
Th-227	Bi-211
Th-227	Pb-211
Bi-214	Ra-226

Ra-226 by gamma spectroscopy is typically determined by inference from daughters (e.g. Bi-214) after sealing the sample in an appropriate counting geometry/container and waiting 21 days to allow the Ra-226 decay chain through Rn-222 to reach secular equilibrium. Such an approach is considered to be the most reliable and representative means for establishing the true Ra-226 concentration in the sample. The method requested by the client to report Ra-226, using its own 186 keV gamma-ray emission, is subject to interference and potential bias due to the 185.7 keV U-235 gamma ray. Experience also indicates gamma spectroscopy software does not consistently assign accurate peak areas to Ra-226 (186 keV), with the problem compounded by slight drift of the instrumentation. The laboratory considers Ra-226 reported based upon the 186 keV gamma-ray emission to be best used by the client in a qualitative fashion. The following samples were affected: East Brown Brick (160-46685-1), South Brown Brick (160-46685-2), West Brown Brick (160-46685-3), East White Brick (160-46685-4), South White Brick (160-46685-5), West White Brick (160-46685-6), NW Restroom - East Wall (160-46685-7), NW Restroom - North Wall (160-46685-8), SW Restroom - North Wall (160-46685-9), SW Restroom - West Wall (160-46685-10), SE Restroom - North Wall (160-46685-11), SE Restroom - West Wall (160-46685-12), Boiler Door Liner (160-46685-13), 2nd Floor Hall, N-Wall, East End (160-46685-14), 2nd Floor Hall, S-Wall, West end (160-46685-15), 1st Floor Hall, S-Wall, West End (160-46685-16), 1st Floor Hall, N-Wall, East End (160-46685-17), Gym - East of Stage (160-46685-18) and (160-46685-A-18-C DU).

Case Narrative

Client: Wood E&I Solutions Inc
Project/Site: Building material (Firebrick, Ceramic)

Job ID: 160-46685-1

Job ID: 160-46685-1 (Continued)

Laboratory: Eurofins St. Louis (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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Chain of Custody Record

Client Information		Sampler: <i>McNally</i>	Lab PM: <i>Vania, Ivan H</i>	Carrier Tracking No(s):	COC No. 160-11036-5380.1			
Client Contact: <i>Tom McNally</i>		Phone: <i>309-253-2169</i>	E-Mail: <i>Ivan.Vania@et.eurofins.com</i>	State of Origin:	Page: 1 of 4			
Company: <i>Wood E&I Solutions Inc</i>		PWSID:		Job #:				
Address: <i>2412 W Nebraska</i>		Due Date Requested:		Analysis Requested				
City: <i>Peoria</i>		TAT Requested (days):		Total Number of Containers				
State, Zip: <i>IL, 61604</i>		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		Preservation Codes:				
Phone: <i>309-253-2169(Tel)</i>		PO #:		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)				
Email: <i>tom.mcnally@woodplc.com</i>		Purchase Order Requested		Other:				
Project Name: <i>16010336</i>		WO #:						
Building material (Firebrick, Ceramic)		Project #:						
Site:		SSOW#:						
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wast/wat)	Field Filtered Sample (Yes or No)	901.1, Ra - (MOD) NORM Target List	6020B - Uranium and Thorium	Special Instructions/Note:
<i>East Brown Brick</i>	<i>8/17/22</i>	<i>0810</i>	<i>G</i>	<i>Solid</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<i>South Brown Brick</i>		<i>0850</i>		<i>Solid</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<i>West Brown Brick</i>		<i>0910</i>		<i>Solid</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<i>East white Brick</i>		<i>1000</i>		<i>Solid</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<i>South white Brick</i>		<i>1015</i>		<i>Solid</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<i>West white Brick</i>		<i>1030</i>		<i>Solid</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<i>NW restroom - East wall</i>		<i>1120</i>		<i>Solid</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<i>NW restroom - North wall</i>		<i>1135</i>		<i>Solid</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<i>SW restroom - North wall</i>		<i>1150</i>		<i>Solid</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<i>SW restroom - West wall</i>		<i>1205</i>		<i>Solid</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<i>SE restroom - North wall</i>		<i>1225</i>		<i>Solid</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological								
Deliverable Requested: <input type="checkbox"/> I, II, III, IV, Other (specify) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months								
Special Instructions/QC Requirements:								
Empty Kit Relinquished by:			Date:			Method of Shipment:		
Relinquished by: <i>[Signature]</i>			Date/Time: <i>8/17/22 1800</i>			Received by: <i>FEDEX</i>		
Relinquished by:			Date/Time:			Received by: <i>Suzanne Weatherston</i>		
Relinquished by:			Date/Time:			Received by: <i>[Signature]</i>		
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No			Custody Seal No.:			Cooler Temperature(s) °C and Other Remarks:		



Eurofins St. Louis
 13715 Rider Trail North
 Earth City, MO 63045
 Phone: 314-298-9566 Fax: 314-298-8757

Chain of Custody Record



Client Information Client Contact: Tom McNally Company: Wood E&I Solutions Inc Address: 2412 W Nebraska City: Peoria State/Zip: IL, 61604 Phone: 309-253-2169(Tel) Email: tom.mcnelly@woodpic.com Project Name: Building material (Firebrick, Ceramic) Site:		Lab PM: Vania, Ivan H E-Mail: Ivan.Vania@et.eurofins.com Carrier Tracking No(s): 160-11036-5380-2 State of Origin: Page 2 of 4 Job #	
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No Purchase Order Requested: PO #: WO #: Project #: 16010336 SSOW#:		Analysis Requested 901.1 Ra - (MOD) NORM Target List 60208 - Uranium and Thorium Field Filtered Sample (Yes or No) Total Number of Containers	
Sample Identification SE rest room - west wall BOILER DOOR LIVER 2nd FLOOR HALL N-WALL EAST END 2nd FLOOR HALL S-WALL WEST END 1st FLOOR HALL S-WALL WEST END 1st FLOOR HALL N-WALL EAST END GYM - EAST OF STAGE	Sample Date 8/17/22 1444 1525 1535 1550 1604 1620	Sample Time G G G G G G G G G	Matrix Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)			
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Special Instructions/QC Requirements: Method of Shipment: _____ Date/Time: _____ Received by: _____ Received by: Sana Wodhington Received by: _____ Date/Time: 8-18-22 0850 Date/Time: _____ Date/Time: _____ Company: _____ Company: _____ Company: _____ Cooler Temperature(s) °C and Other Remarks:			



Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 160-46685-1

Login Number: 46685

List Source: Eurofins St. Louis

List Number: 1

Creator: Worthington, Sierra M

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Definitions/Glossary

Client: Wood E&I Solutions Inc
Project/Site: Building material (Firebrick, Ceramic)

Job ID: 160-46685-1

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Method Summary

Client: Wood E&I Solutions Inc
Project/Site: Building material (Firebrick, Ceramic)

Job ID: 160-46685-1

Method	Method Description	Protocol	Laboratory
901.1	Radium-226 & Other Gamma Emitters (GS)	EPA	EET SL
Dry and Grind	Preparation, Dry and Grind	None	EET SL
Fill_Geo-0	Fill Geometry, No In-Growth	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency
None = None

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566



Sample Summary

Client: Wood E&I Solutions Inc
Project/Site: Building material (Firebrick, Ceramic)

Job ID: 160-46685-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-46685-1	East Brown Brick	Solid	08/17/22 08:10	08/18/22 08:50
160-46685-2	South Brown Brick	Solid	08/17/22 08:50	08/18/22 08:50
160-46685-3	West Brown Brick	Solid	08/17/22 09:10	08/18/22 08:50
160-46685-4	East White Brick	Solid	08/17/22 10:00	08/18/22 08:50
160-46685-5	South White Brick	Solid	08/17/22 10:15	08/18/22 08:50
160-46685-6	West White Brick	Solid	08/17/22 10:30	08/18/22 08:50
160-46685-7	NW Restroom - East Wall	Solid	08/17/22 11:20	08/18/22 08:50
160-46685-8	NW Restroom - North Wall	Solid	08/17/22 11:35	08/18/22 08:50
160-46685-9	SW Restroom - North Wall	Solid	08/17/22 11:50	08/18/22 08:50
160-46685-10	SW Restroom - West Wall	Solid	08/17/22 12:05	08/18/22 08:50
160-46685-11	SE Restroom - North Wall	Solid	08/17/22 12:25	08/18/22 08:50
160-46685-12	SE Restroom - West Wall	Solid	08/17/22 12:29	08/18/22 08:50
160-46685-13	Boiler Door Liner	Solid	08/17/22 14:44	08/18/22 08:50
160-46685-14	2nd Floor Hall, N-Wall, East End	Solid	08/17/22 15:25	08/18/22 08:50
160-46685-15	2nd Floor Hall, S-Wall, West end	Solid	08/17/22 15:35	08/18/22 08:50
160-46685-16	1st Floor Hall, S-Wall, West End	Solid	08/17/22 15:00	08/18/22 08:50
160-46685-17	1st Floor Hall, N-Wall, East End	Solid	08/17/22 16:04	08/18/22 08:50
160-46685-18	Gym - East of Stage	Solid	08/17/22 16:20	08/18/22 08:50



Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Building material (Firebrick, Ceramic)

Job ID: 160-46685-1

Client Sample ID: East Brown Brick

Lab Sample ID: 160-46685-1

Date Collected: 08/17/22 08:10

Matrix: Solid

Date Received: 08/18/22 08:50

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	5.76		2.15	2.25	5.00	2.47	pCi/g	08/24/22 16:03	08/29/22 12:59	1
Lead-210	-2.65	U	1.89	1.92		5.33	pCi/g	08/24/22 16:03	08/29/22 12:59	1
Thorium-232	2.73		0.353	0.449		0.269	pCi/g	08/24/22 16:03	08/29/22 12:59	1
Uranium-238	2.22		0.909	0.941		1.48	pCi/g	08/24/22 16:03	08/29/22 12:59	1
Radium-228	2.73		0.353	0.449		0.269	pCi/g	08/24/22 16:03	08/29/22 12:59	1
Bismuth-214	3.50		0.330	0.486		0.176	pCi/g	08/24/22 16:03	08/29/22 12:59	1
Actinium-227	0.847		0.646	0.652		0.777	pCi/g	08/24/22 16:03	08/29/22 12:59	1
Actinium-228	2.73		0.353	0.449		0.269	pCi/g	08/24/22 16:03	08/29/22 12:59	1
Bismuth-212	3.34		0.897	0.960		0.645	pCi/g	08/24/22 16:03	08/29/22 12:59	1
Lead-212	2.26		0.199	0.309		0.175	pCi/g	08/24/22 16:03	08/29/22 12:59	1
Lead-214	3.49		0.312	0.472		0.246	pCi/g	08/24/22 16:03	08/29/22 12:59	1
Potassium-40	4.67		1.09	1.19		0.632	pCi/g	08/24/22 16:03	08/29/22 12:59	1
Protactinium-231	1.24	U	4.00	4.00		8.86	pCi/g	08/24/22 16:03	08/29/22 12:59	1
Thallium-208	0.872		0.150	0.175		0.113	pCi/g	08/24/22 16:03	08/29/22 12:59	1
Thorium-234	2.22		0.909	0.941		1.48	pCi/g	08/24/22 16:03	08/29/22 12:59	1
Uranium-235	-0.336	U	0.991	0.991		1.65	pCi/g	08/24/22 16:03	08/29/22 12:59	1
Other Detected			Count	Total						
Radionuclides			Uncert.	Uncert.	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Other Detected			(2σ+/-)	(2σ+/-)			pCi/g	08/24/22 16:03	08/29/22 12:59	1
Radionuclide										

Client Sample ID: South Brown Brick

Lab Sample ID: 160-46685-2

Date Collected: 08/17/22 08:50

Matrix: Solid

Date Received: 08/18/22 08:50

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	8.60		2.03	2.52	5.00	2.04	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Lead-210	0.885	U	2.18	2.18		3.64	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Thorium-232	2.44		0.308	0.396		0.221	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Uranium-238	2.35		0.849	0.888		1.31	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Radium-228	2.44		0.308	0.396		0.221	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Bismuth-214	3.29		0.261	0.430		0.124	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Actinium-227	0.762	U	0.885	0.889		0.864	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Actinium-228	2.44		0.308	0.396		0.221	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Bismuth-212	2.70		0.747	0.797		0.874	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Lead-212	2.40		0.173	0.355		0.146	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Lead-214	3.48		0.228	0.427		0.208	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Potassium-40	3.33		0.936	0.996		0.698	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Protactinium-231	1.09	U	4.55	4.56		7.58	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Thallium-208	0.787		0.102	0.130		0.0596	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Thorium-234	2.35		0.849	0.888		1.31	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Uranium-235	-0.319	U	0.858	0.858		1.42	pCi/g	08/24/22 16:03	08/29/22 13:01	1

Eurofins St. Louis

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Building material (Firebrick, Ceramic)

Job ID: 160-46685-1

Client Sample ID: South Brown Brick

Lab Sample ID: 160-46685-2

Date Collected: 08/17/22 08:50

Matrix: Solid

Date Received: 08/18/22 08:50

Other Detected		Count	Total							
Radionuclides		Uncert.	Uncert.	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
		(2σ+/-)	(2σ+/-)							
Other Detected	None					pCi/g	08/24/22 16:03	08/29/22 13:01	1	
Radionuclide										

Client Sample ID: West Brown Brick

Lab Sample ID: 160-46685-3

Date Collected: 08/17/22 09:10

Matrix: Solid

Date Received: 08/18/22 08:50

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.000	U	1.92	1.92	5.00	3.23	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Lead-210	2.36		1.50	1.53		2.16	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Thorium-232	2.99		0.430	0.558		0.244	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Uranium-238	3.64		1.38	1.44		2.86	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Radium-228	2.99		0.430	0.558		0.244	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Bismuth-214	3.62		0.348	0.554		0.187	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Actinium-227	-0.0788	U	0.163	0.164		1.42	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Actinium-228	2.99		0.430	0.558		0.244	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Bismuth-212	2.87		0.996	1.05		0.853	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Lead-212	2.20		0.187	0.322		0.166	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Lead-214	3.54		0.289	0.511		0.224	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Potassium-40	4.06		0.940	1.06		0.600	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Protactinium-231	-2.27	U	9.61	9.61		16.0	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Thallium-208	0.854		0.154	0.184		0.120	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Thorium-234	3.64		1.38	1.44		2.86	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Uranium-235	0.389	U	0.337	0.340		0.625	pCi/g	08/24/22 16:03	08/29/22 13:01	1
Other Detected		Count	Total							
Radionuclides		Uncert.	Uncert.	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
		(2σ+/-)	(2σ+/-)							
Other Detected	None					pCi/g	08/24/22 16:03	08/29/22 13:01	1	
Radionuclide										

Client Sample ID: East White Brick

Lab Sample ID: 160-46685-4

Date Collected: 08/17/22 10:00

Matrix: Solid

Date Received: 08/18/22 08:50

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	6.59		2.39	2.54	5.00	2.55	pCi/g	08/24/22 16:03	08/29/22 13:02	1
Lead-210	-2.09	U	2.01	2.03		5.50	pCi/g	08/24/22 16:03	08/29/22 13:02	1
Thorium-232	2.40		0.435	0.520		0.404	pCi/g	08/24/22 16:03	08/29/22 13:02	1
Uranium-238	3.59		1.57	1.63		3.57	pCi/g	08/24/22 16:03	08/29/22 13:02	1
Radium-228	2.40		0.435	0.520		0.404	pCi/g	08/24/22 16:03	08/29/22 13:02	1
Bismuth-214	2.92		0.303	0.461		0.241	pCi/g	08/24/22 16:03	08/29/22 13:02	1
Actinium-227	0.611	U	0.807	0.810		1.20	pCi/g	08/24/22 16:03	08/29/22 13:02	1
Actinium-228	2.40		0.435	0.520		0.404	pCi/g	08/24/22 16:03	08/29/22 13:02	1
Bismuth-212	3.95		1.11	1.20		0.805	pCi/g	08/24/22 16:03	08/29/22 13:02	1

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Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Building material (Firebrick, Ceramic)

Job ID: 160-46685-1

Client Sample ID: East White Brick

Lab Sample ID: 160-46685-4

Date Collected: 08/17/22 10:00

Matrix: Solid

Date Received: 08/18/22 08:50

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS) (Continued)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Lead-212	1.91		0.196	0.300		0.203	pCi/g	08/24/22 16:03	08/29/22 13:02	1
Lead-214	3.10		0.258	0.450		0.238	pCi/g	08/24/22 16:03	08/29/22 13:02	1
Potassium-40	3.52		0.878	0.973		0.724	pCi/g	08/24/22 16:03	08/29/22 13:02	1
Protactinium-231	-2.85	U	9.92	9.93		16.5	pCi/g	08/24/22 16:03	08/29/22 13:02	1
Thallium-208	0.849		0.138	0.171		0.105	pCi/g	08/24/22 16:03	08/29/22 13:02	1
Thorium-234	3.59		1.57	1.63		3.57	pCi/g	08/24/22 16:03	08/29/22 13:02	1
Uranium-235	0.112	U	0.223	0.224		2.20	pCi/g	08/24/22 16:03	08/29/22 13:02	1
Other Detected Radionuclides			Count	Total						
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Other Detected Radionuclide	None						pCi/g	08/24/22 16:03	08/29/22 13:02	1

Client Sample ID: South White Brick

Lab Sample ID: 160-46685-5

Date Collected: 08/17/22 10:15

Matrix: Solid

Date Received: 08/18/22 08:50

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	13.1		2.97	3.42	5.00	3.07	pCi/g	08/24/22 16:03	08/29/22 13:35	1
Lead-210	5.82		2.79	2.88		3.68	pCi/g	08/24/22 16:03	08/29/22 13:35	1
Thorium-232	3.09		0.417	0.556		0.364	pCi/g	08/24/22 16:03	08/29/22 13:35	1
Uranium-238	7.67		1.99	2.19		4.26	pCi/g	08/24/22 16:03	08/29/22 13:35	1
Radium-228	3.09		0.417	0.556		0.364	pCi/g	08/24/22 16:03	08/29/22 13:35	1
Bismuth-214	6.76		0.497	0.945		0.214	pCi/g	08/24/22 16:03	08/29/22 13:35	1
Actinium-227	0.939	U	2.31	2.32		1.65	pCi/g	08/24/22 16:03	08/29/22 13:35	1
Actinium-228	3.09		0.417	0.556		0.364	pCi/g	08/24/22 16:03	08/29/22 13:35	1
Bismuth-212	3.17		1.32	1.37		1.81	pCi/g	08/24/22 16:03	08/29/22 13:35	1
Lead-212	2.56		0.246	0.392		0.256	pCi/g	08/24/22 16:03	08/29/22 13:35	1
Lead-214	6.29		0.410	0.854		0.300	pCi/g	08/24/22 16:03	08/29/22 13:35	1
Potassium-40	0.649	U	1.65	1.66		1.82	pCi/g	08/24/22 16:03	08/29/22 13:35	1
Protactinium-231	-1.91	U	12.6	12.6		21.1	pCi/g	08/24/22 16:03	08/29/22 13:35	1
Thallium-208	0.978		0.177	0.212		0.149	pCi/g	08/24/22 16:03	08/29/22 13:35	1
Thorium-234	7.67		1.99	2.19		4.26	pCi/g	08/24/22 16:03	08/29/22 13:35	1
Uranium-235	0.309	U	0.638	0.639		2.66	pCi/g	08/24/22 16:03	08/29/22 13:35	1
Other Detected Radionuclides			Count	Total						
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Other Detected Radionuclide	None						pCi/g	08/24/22 16:03	08/29/22 13:35	1

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Building material (Firebrick, Ceramic)

Job ID: 160-46685-1

Client Sample ID: West White Brick

Lab Sample ID: 160-46685-6

Date Collected: 08/17/22 10:30

Matrix: Solid

Date Received: 08/18/22 08:50

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	9.82		2.44	2.98	5.00	2.46	pCi/g	08/24/22 16:03	08/29/22 13:33	1
Lead-210	3.77		1.82	1.87		2.34	pCi/g	08/24/22 16:03	08/29/22 13:33	1
Thorium-232	2.66		0.386	0.472		0.219	pCi/g	08/24/22 16:03	08/29/22 13:33	1
Uranium-238	3.60		0.849	0.939		1.49	pCi/g	08/24/22 16:03	08/29/22 13:33	1
Radium-228	2.66		0.386	0.472		0.219	pCi/g	08/24/22 16:03	08/29/22 13:33	1
Bismuth-214	3.93		0.282	0.497		0.173	pCi/g	08/24/22 16:03	08/29/22 13:33	1
Actinium-227	-0.0410	U	0.0711	0.0713		1.45	pCi/g	08/24/22 16:03	08/29/22 13:33	1
Actinium-228	2.66		0.386	0.472		0.219	pCi/g	08/24/22 16:03	08/29/22 13:33	1
Bismuth-212	2.92		0.772	0.829		0.880	pCi/g	08/24/22 16:03	08/29/22 13:33	1
Lead-212	2.27		0.179	0.344		0.171	pCi/g	08/24/22 16:03	08/29/22 13:33	1
Lead-214	4.13		0.245	0.494		0.209	pCi/g	08/24/22 16:03	08/29/22 13:33	1
Potassium-40	2.92		0.732	0.790		0.601	pCi/g	08/24/22 16:03	08/29/22 13:33	1
Protactinium-231	0.403	U	2.68	2.68		8.37	pCi/g	08/24/22 16:03	08/29/22 13:33	1
Thallium-208	0.849		0.131	0.158		0.0925	pCi/g	08/24/22 16:03	08/29/22 13:33	1
Thorium-234	3.60		0.849	0.939		1.49	pCi/g	08/24/22 16:03	08/29/22 13:33	1
Uranium-235	-0.375	U	0.517	0.518		1.61	pCi/g	08/24/22 16:03	08/29/22 13:33	1
Other Detected			Count	Total						
Radionuclides	Result	Qualifier	Uncert.	Uncert.	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Other Detected	None						pCi/g	08/24/22 16:03	08/29/22 13:33	1
Radionuclide										

Client Sample ID: NW Restroom - East Wall

Lab Sample ID: 160-46685-7

Date Collected: 08/17/22 11:20

Matrix: Solid

Date Received: 08/18/22 08:50

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	6.08		2.25	2.36	5.00	2.58	pCi/g	08/24/22 16:03	08/29/22 13:34	1
Lead-210	3.06	U	2.89	2.91		3.91	pCi/g	08/24/22 16:03	08/29/22 13:34	1
Thorium-232	2.98		0.408	0.507		0.337	pCi/g	08/24/22 16:03	08/29/22 13:34	1
Uranium-238	1.23	U	1.27	1.28		2.07	pCi/g	08/24/22 16:03	08/29/22 13:34	1
Radium-228	2.98		0.408	0.507		0.337	pCi/g	08/24/22 16:03	08/29/22 13:34	1
Bismuth-214	2.28		0.310	0.387		0.163	pCi/g	08/24/22 16:03	08/29/22 13:34	1
Actinium-227	0.311	U	1.08	1.08		1.40	pCi/g	08/24/22 16:03	08/29/22 13:34	1
Actinium-228	2.98		0.408	0.507		0.337	pCi/g	08/24/22 16:03	08/29/22 13:34	1
Bismuth-212	0.952	U	1.69	1.70		2.84	pCi/g	08/24/22 16:03	08/29/22 13:34	1
Lead-212	2.74		0.249	0.380		0.199	pCi/g	08/24/22 16:03	08/29/22 13:34	1
Lead-214	2.58		0.290	0.391		0.283	pCi/g	08/24/22 16:03	08/29/22 13:34	1
Potassium-40	19.3		2.33	3.04		0.517	pCi/g	08/24/22 16:03	08/29/22 13:34	1
Protactinium-231	-1.65	U	6.33	6.33		10.6	pCi/g	08/24/22 16:03	08/29/22 13:34	1
Thallium-208	0.857		0.154	0.177		0.108	pCi/g	08/24/22 16:03	08/29/22 13:34	1
Thorium-234	1.23	U	1.27	1.28		2.07	pCi/g	08/24/22 16:03	08/29/22 13:34	1
Uranium-235	0.242	U	0.477	0.478		1.86	pCi/g	08/24/22 16:03	08/29/22 13:34	1

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Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Building material (Firebrick, Ceramic)

Job ID: 160-46685-1

Client Sample ID: NW Restroom - East Wall

Lab Sample ID: 160-46685-7

Date Collected: 08/17/22 11:20

Matrix: Solid

Date Received: 08/18/22 08:50

Other Detected Radionuclides		Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Other Detected Radionuclide		None						pCi/g	08/24/22 16:03	08/29/22 13:34	1

Client Sample ID: NW Restroom - North Wall

Lab Sample ID: 160-46685-8

Date Collected: 08/17/22 11:35

Matrix: Solid

Date Received: 08/18/22 08:50

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Radium-226	3.92		1.58	1.73	5.00	2.42	pCi/g	08/24/22 16:03	08/29/22 13:36	1	
Lead-210	2.13	U	1.67	1.69		2.16	pCi/g	08/24/22 16:03	08/29/22 13:36	1	
Thorium-232	2.13		0.280	0.354		0.215	pCi/g	08/24/22 16:03	08/29/22 13:36	1	
Uranium-238	1.14	U	0.917	0.926		1.46	pCi/g	08/24/22 16:03	08/29/22 13:36	1	
Radium-228	2.13		0.280	0.354		0.215	pCi/g	08/24/22 16:03	08/29/22 13:36	1	
Bismuth-214	1.96		0.277	0.344		0.192	pCi/g	08/24/22 16:03	08/29/22 13:36	1	
Actinium-227	0.223	U	0.827	0.828		1.16	pCi/g	08/24/22 16:03	08/29/22 13:36	1	
Actinium-228	2.13		0.280	0.354		0.215	pCi/g	08/24/22 16:03	08/29/22 13:36	1	
Bismuth-212	3.50		0.828	0.904		0.552	pCi/g	08/24/22 16:03	08/29/22 13:36	1	
Lead-212	2.41		0.186	0.363		0.141	pCi/g	08/24/22 16:03	08/29/22 13:36	1	
Lead-214	2.04		0.206	0.295		0.177	pCi/g	08/24/22 16:03	08/29/22 13:36	1	
Potassium-40	15.9		1.70	2.35		0.337	pCi/g	08/24/22 16:03	08/29/22 13:36	1	
Protactinium-231	1.11	U	4.35	4.35		7.26	pCi/g	08/24/22 16:03	08/29/22 13:36	1	
Thallium-208	0.849		0.131	0.158		0.0884	pCi/g	08/24/22 16:03	08/29/22 13:36	1	
Thorium-234	1.14	U	0.917	0.926		1.46	pCi/g	08/24/22 16:03	08/29/22 13:36	1	
Uranium-235	-0.296	U	0.435	0.436		0.720	pCi/g	08/24/22 16:03	08/29/22 13:36	1	
Other Detected Radionuclides		None						pCi/g	08/24/22 16:03	08/29/22 13:36	1

Client Sample ID: SW Restroom - North Wall

Lab Sample ID: 160-46685-9

Date Collected: 08/17/22 11:50

Matrix: Solid

Date Received: 08/18/22 08:50

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	4.63		2.21	2.29	5.00	2.53	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Lead-210	1.98	U	2.77	2.78		3.74	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Thorium-232	2.59		0.385	0.493		0.409	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Uranium-238	2.54	U	1.69	1.71		3.62	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Radium-228	2.59		0.385	0.493		0.409	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Bismuth-214	2.12		0.300	0.392		0.186	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Actinium-227	1.05	U	1.86	1.86		1.23	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Actinium-228	2.59		0.385	0.493		0.409	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Bismuth-212	3.75		1.17	1.25		0.805	pCi/g	08/24/22 16:03	08/29/22 14:09	1

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Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Building material (Firebrick, Ceramic)

Job ID: 160-46685-1

Client Sample ID: SW Restroom - North Wall

Lab Sample ID: 160-46685-9

Date Collected: 08/17/22 11:50

Matrix: Solid

Date Received: 08/18/22 08:50

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS) (Continued)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Lead-212	2.26		0.222	0.349		0.186	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Lead-214	2.03		0.278	0.368		0.223	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Potassium-40	15.2		2.25	2.89		1.19	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Protactinium-231	2.22	U	9.65	9.65		16.2	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Thallium-208	0.870		0.158	0.189		0.119	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Thorium-234	2.54	U	1.69	1.71		3.62	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Uranium-235	0.315	U	0.792	0.793		1.32	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Other Detected Radionuclides			Count	Total						
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Other Detected Radionuclide	None						pCi/g	08/24/22 16:03	08/29/22 14:09	1

Client Sample ID: SW Restroom - West Wall

Lab Sample ID: 160-46685-10

Date Collected: 08/17/22 12:05

Matrix: Solid

Date Received: 08/18/22 08:50

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	4.55		1.79	1.96	5.00	1.96	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Lead-210	-1.47	U	1.45	1.46		5.19	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Thorium-232	1.82		0.278	0.334		0.244	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Uranium-238	2.27		0.860	0.896		1.29	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Radium-228	1.82		0.278	0.334		0.244	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Bismuth-214	1.79		0.271	0.329		0.194	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Actinium-227	0.500	U	1.06	1.06		1.13	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Actinium-228	1.82		0.278	0.334		0.244	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Bismuth-212	0.325	U	1.25	1.25		2.13	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Lead-212	1.87		0.182	0.303		0.152	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Lead-214	1.77		0.189	0.264		0.194	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Potassium-40	15.5		1.86	2.45		0.841	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Protactinium-231	-1.49	U	5.14	5.15		8.58	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Thallium-208	0.570		0.117	0.131		0.0972	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Thorium-234	2.27		0.860	0.896		1.29	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Uranium-235	0.264	U	0.513	0.513		1.51	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Other Detected Radionuclides			Count	Total						
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Other Detected Radionuclide	None						pCi/g	08/24/22 16:03	08/29/22 14:07	1

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Building material (Firebrick, Ceramic)

Job ID: 160-46685-1

Client Sample ID: SE Restroom - North Wall

Lab Sample ID: 160-46685-11

Date Collected: 08/17/22 12:25

Matrix: Solid

Date Received: 08/18/22 08:50

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	6.19		2.71	2.80	5.00	2.95	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Lead-210	4.53		3.70	3.74		4.49	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Thorium-232	2.56		0.485	0.550		0.333	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Uranium-238	1.80	U	1.34	1.36		2.15	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Radium-228	2.56		0.485	0.550		0.333	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Bismuth-214	2.59		0.352	0.440		0.189	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Actinium-227	0.714	U	1.35	1.35		1.48	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Actinium-228	2.56		0.485	0.550		0.333	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Bismuth-212	0.961	U	1.77	1.77		2.97	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Lead-212	2.87		0.263	0.398		0.208	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Lead-214	2.31		0.302	0.382		0.287	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Potassium-40	14.3		2.07	2.52		0.553	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Protactinium-231	0.000	U	0.940	0.940		10.4	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Thallium-208	1.06		0.168	0.200		0.0983	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Thorium-234	1.80	U	1.34	1.36		2.15	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Uranium-235	-0.457	U	1.37	1.37		2.28	pCi/g	08/24/22 16:03	08/29/22 14:07	1
Other Detected			Count	Total						
Radionuclides			Uncert.	Uncert.	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<i>Other Detected</i>			<i>(2σ+/-)</i>	<i>(2σ+/-)</i>			<i>pCi/g</i>	<i>08/24/22 16:03</i>	<i>08/29/22 14:07</i>	<i>1</i>
<i>Radionuclide</i>										

Client Sample ID: SE Restroom - West Wall

Lab Sample ID: 160-46685-12

Date Collected: 08/17/22 12:29

Matrix: Solid

Date Received: 08/18/22 08:50

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	3.43		1.49	1.61	5.00	1.78	pCi/g	08/24/22 16:03	08/29/22 14:11	1
Lead-210	1.21	U	2.36	2.37		3.94	pCi/g	08/24/22 16:03	08/29/22 14:11	1
Thorium-232	2.16		0.313	0.383		0.169	pCi/g	08/24/22 16:03	08/29/22 14:11	1
Uranium-238	2.17		0.816	0.851		1.38	pCi/g	08/24/22 16:03	08/29/22 14:11	1
Radium-228	2.16		0.313	0.383		0.169	pCi/g	08/24/22 16:03	08/29/22 14:11	1
Bismuth-214	1.87		0.252	0.319		0.166	pCi/g	08/24/22 16:03	08/29/22 14:11	1
Actinium-227	0.214	U	0.352	0.353		1.54	pCi/g	08/24/22 16:03	08/29/22 14:11	1
Actinium-228	2.16		0.313	0.383		0.169	pCi/g	08/24/22 16:03	08/29/22 14:11	1
Bismuth-212	3.02		1.18	1.22		1.05	pCi/g	08/24/22 16:03	08/29/22 14:11	1
Lead-212	2.26		0.193	0.351		0.151	pCi/g	08/24/22 16:03	08/29/22 14:11	1
Lead-214	2.01		0.198	0.287		0.180	pCi/g	08/24/22 16:03	08/29/22 14:11	1
Potassium-40	13.2		1.65	2.13		0.380	pCi/g	08/24/22 16:03	08/29/22 14:11	1
Protactinium-231	0.000	U	0.640	0.640		7.69	pCi/g	08/24/22 16:03	08/29/22 14:11	1
Thallium-208	0.877		0.142	0.169		0.0942	pCi/g	08/24/22 16:03	08/29/22 14:11	1
Thorium-234	2.17		0.816	0.851		1.38	pCi/g	08/24/22 16:03	08/29/22 14:11	1
Uranium-235	-0.0326	U	0.0548	0.0549		1.52	pCi/g	08/24/22 16:03	08/29/22 14:11	1

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Building material (Firebrick, Ceramic)

Job ID: 160-46685-1

Client Sample ID: SE Restroom - West Wall

Lab Sample ID: 160-46685-12

Date Collected: 08/17/22 12:29

Matrix: Solid

Date Received: 08/18/22 08:50

			Count	Total							
			Uncert.	Uncert.	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Other Detected Radionuclides	Result	Qualifier	(2σ+/-)	(2σ+/-)							
Other Detected Radionuclide	None						pCi/g	08/24/22 16:03	08/29/22 14:11	1	

Client Sample ID: Boiler Door Liner

Lab Sample ID: 160-46685-13

Date Collected: 08/17/22 14:44

Matrix: Solid

Date Received: 08/18/22 08:50

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

			Count	Total							
			Uncert.	Uncert.	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)							
Radium-226	-0.130	U	3.72	3.72	5.00	4.96	pCi/g	08/24/22 16:03	08/29/22 14:08	1	
Lead-210	-5.72	U	5.67	5.71		10.2	pCi/g	08/24/22 16:03	08/29/22 14:08	1	
Thorium-232	0.510		0.349	0.354		0.418	pCi/g	08/24/22 16:03	08/29/22 14:08	1	
Uranium-238	3.42	U	2.72	2.75		4.63	pCi/g	08/24/22 16:03	08/29/22 14:08	1	
Radium-228	0.510		0.349	0.354		0.418	pCi/g	08/24/22 16:03	08/29/22 14:08	1	
Bismuth-214	0.0940	U	0.591	0.591		1.15	pCi/g	08/24/22 16:03	08/29/22 14:08	1	
Actinium-227	1.61		0.914	0.934		0.967	pCi/g	08/24/22 16:03	08/29/22 14:08	1	
Actinium-228	0.510		0.349	0.354		0.418	pCi/g	08/24/22 16:03	08/29/22 14:08	1	
Bismuth-212	-0.0425	U	4.90	4.90		1.61	pCi/g	08/24/22 16:03	08/29/22 14:08	1	
Lead-212	0.0222	U	0.349	0.349		0.601	pCi/g	08/24/22 16:03	08/29/22 14:08	1	
Lead-214	0.934		0.251	0.274		0.253	pCi/g	08/24/22 16:03	08/29/22 14:08	1	
Potassium-40	13.7		3.41	3.78		2.47	pCi/g	08/24/22 16:03	08/29/22 14:08	1	
Protactinium-231	3.23	U	10.5	10.5		17.9	pCi/g	08/24/22 16:03	08/29/22 14:08	1	
Thallium-208	0.0781	U	0.142	0.142		0.254	pCi/g	08/24/22 16:03	08/29/22 14:08	1	
Thorium-234	3.42	U	2.72	2.75		4.63	pCi/g	08/24/22 16:03	08/29/22 14:08	1	
Uranium-235	-0.783	U	1.56	1.56		2.93	pCi/g	08/24/22 16:03	08/29/22 14:08	1	

			Count	Total							
			Uncert.	Uncert.	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Other Detected Radionuclides	Result	Qualifier	(2σ+/-)	(2σ+/-)							
Other Detected Radionuclide	None						pCi/g	08/24/22 16:03	08/29/22 14:08	1	

Client Sample ID: 2nd Floor Hall, N-Wall, East End

Lab Sample ID: 160-46685-14

Date Collected: 08/17/22 15:25

Matrix: Solid

Date Received: 08/18/22 08:50

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

			Count	Total							
			Uncert.	Uncert.	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)							
Radium-226	4.73		1.69	1.88	5.00	1.80	pCi/g	08/24/22 16:03	08/29/22 15:00	1	
Lead-210	-0.138	U	1.34	1.34		3.81	pCi/g	08/24/22 16:03	08/29/22 15:00	1	
Thorium-232	1.83		0.352	0.399		0.185	pCi/g	08/24/22 16:03	08/29/22 15:00	1	
Uranium-238	1.76		0.856	0.878		1.33	pCi/g	08/24/22 16:03	08/29/22 15:00	1	
Radium-228	1.83		0.352	0.399		0.185	pCi/g	08/24/22 16:03	08/29/22 15:00	1	
Bismuth-214	1.61		0.239	0.291		0.155	pCi/g	08/24/22 16:03	08/29/22 15:00	1	
Actinium-227	-0.0191	U	0.122	0.122		1.23	pCi/g	08/24/22 16:03	08/29/22 15:00	1	
Actinium-228	1.83		0.352	0.399		0.185	pCi/g	08/24/22 16:03	08/29/22 15:00	1	
Bismuth-212	0.594	U	1.10	1.10		1.85	pCi/g	08/24/22 16:03	08/29/22 15:00	1	

Eurofins St. Louis

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Building material (Firebrick, Ceramic)

Job ID: 160-46685-1

Client Sample ID: 2nd Floor Hall, N-Wall, East End

Lab Sample ID: 160-46685-14

Date Collected: 08/17/22 15:25

Matrix: Solid

Date Received: 08/18/22 08:50

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS) (Continued)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Lead-212	1.67		0.168	0.274		0.131	pCi/g	08/24/22 16:03	08/29/22 15:00	1
Lead-214	1.69		0.201	0.266		0.162	pCi/g	08/24/22 16:03	08/29/22 15:00	1
Potassium-40	13.9		1.77	2.27		0.846	pCi/g	08/24/22 16:03	08/29/22 15:00	1
Protactinium-231	-1.25	U	4.39	4.40		7.35	pCi/g	08/24/22 16:03	08/29/22 15:00	1
Thallium-208	0.635		0.110	0.128		0.0733	pCi/g	08/24/22 16:03	08/29/22 15:00	1
Thorium-234	1.76		0.856	0.878		1.33	pCi/g	08/24/22 16:03	08/29/22 15:00	1
Uranium-235	-0.328	U	0.408	0.409		1.35	pCi/g	08/24/22 16:03	08/29/22 15:00	1
Other Detected Radionuclides			Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Other Detected Radionuclide	None						pCi/g	08/24/22 16:03	08/29/22 15:00	1

Client Sample ID: 2nd Floor Hall, S-Wall, West end

Lab Sample ID: 160-46685-15

Date Collected: 08/17/22 15:35

Matrix: Solid

Date Received: 08/18/22 08:50

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	5.59		2.09	2.19	5.00	2.27	pCi/g	08/24/22 16:03	08/29/22 15:01	1
Lead-210	2.26	U	2.53	2.55		4.12	pCi/g	08/24/22 16:03	08/29/22 15:01	1
Thorium-232	2.24		0.379	0.442		0.317	pCi/g	08/24/22 16:03	08/29/22 15:01	1
Uranium-238	0.561	U	0.898	0.900		1.73	pCi/g	08/24/22 16:03	08/29/22 15:01	1
Radium-228	2.24		0.379	0.442		0.317	pCi/g	08/24/22 16:03	08/29/22 15:01	1
Bismuth-214	1.79		0.274	0.329		0.196	pCi/g	08/24/22 16:03	08/29/22 15:01	1
Actinium-227	0.366	U	1.02	1.02		1.32	pCi/g	08/24/22 16:03	08/29/22 15:01	1
Actinium-228	2.24		0.379	0.442		0.317	pCi/g	08/24/22 16:03	08/29/22 15:01	1
Bismuth-212	2.44		0.926	0.959		1.02	pCi/g	08/24/22 16:03	08/29/22 15:01	1
Lead-212	1.97		0.214	0.297		0.177	pCi/g	08/24/22 16:03	08/29/22 15:01	1
Lead-214	1.81		0.263	0.321		0.215	pCi/g	08/24/22 16:03	08/29/22 15:01	1
Potassium-40	18.4		2.29	2.95		0.526	pCi/g	08/24/22 16:03	08/29/22 15:01	1
Protactinium-231	1.18	U	3.73	3.73		8.29	pCi/g	08/24/22 16:03	08/29/22 15:01	1
Thallium-208	0.648		0.160	0.173		0.119	pCi/g	08/24/22 16:03	08/29/22 15:01	1
Thorium-234	0.561	U	0.898	0.900		1.73	pCi/g	08/24/22 16:03	08/29/22 15:01	1
Uranium-235	-0.395	U	1.16	1.16		1.93	pCi/g	08/24/22 16:03	08/29/22 15:01	1
Other Detected Radionuclides			Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Other Detected Radionuclide	None						pCi/g	08/24/22 16:03	08/29/22 15:01	1

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Building material (Firebrick, Ceramic)

Job ID: 160-46685-1

Client Sample ID: 1st Floor Hall, S-Wall, West End
 Date Collected: 08/17/22 15:00
 Date Received: 08/18/22 08:50

Lab Sample ID: 160-46685-16
 Matrix: Solid

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.000	U	1.70	1.70	5.00	2.83	pCi/g	08/24/22 16:03	08/29/22 15:02	1
Lead-210	-1.31	U	2.82	2.83		4.71	pCi/g	08/24/22 16:03	08/29/22 15:02	1
Thorium-232	1.68		0.273	0.323		0.196	pCi/g	08/24/22 16:03	08/29/22 15:02	1
Uranium-238	1.10	U	0.783	0.793		1.29	pCi/g	08/24/22 16:03	08/29/22 15:02	1
Radium-228	1.68		0.273	0.323		0.196	pCi/g	08/24/22 16:03	08/29/22 15:02	1
Bismuth-214	1.52		0.201	0.255		0.0938	pCi/g	08/24/22 16:03	08/29/22 15:02	1
Actinium-227	0.451	U	0.944	0.946		1.09	pCi/g	08/24/22 16:03	08/29/22 15:02	1
Actinium-228	1.68		0.273	0.323		0.196	pCi/g	08/24/22 16:03	08/29/22 15:02	1
Bismuth-212	3.09		0.847	0.906		0.543	pCi/g	08/24/22 16:03	08/29/22 15:02	1
Lead-212	1.60		0.163	0.264		0.143	pCi/g	08/24/22 16:03	08/29/22 15:02	1
Lead-214	1.70		0.179	0.252		0.162	pCi/g	08/24/22 16:03	08/29/22 15:02	1
Potassium-40	15.1		1.82	2.39		0.679	pCi/g	08/24/22 16:03	08/29/22 15:02	1
Protactinium-231	-1.13	U	4.06	4.06		6.79	pCi/g	08/24/22 16:03	08/29/22 15:02	1
Thallium-208	0.466		0.103	0.114		0.0842	pCi/g	08/24/22 16:03	08/29/22 15:02	1
Thorium-234	1.10	U	0.783	0.793		1.29	pCi/g	08/24/22 16:03	08/29/22 15:02	1
Uranium-235	0.0475	U	0.0939	0.0940		1.42	pCi/g	08/24/22 16:03	08/29/22 15:02	1
Other Detected Radionuclides			Count Uncert.	Total Uncert.	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Other Detected Radionuclide	None						pCi/g	08/24/22 16:03	08/29/22 15:02	1

Client Sample ID: 1st Floor Hall, N-Wall, East End
 Date Collected: 08/17/22 16:04
 Date Received: 08/18/22 08:50

Lab Sample ID: 160-46685-17
 Matrix: Solid

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.000	U	2.34	2.34	5.00	3.85	pCi/g	08/24/22 16:03	08/29/22 15:00	1
Lead-210	1.06	U	2.04	2.04		2.89	pCi/g	08/24/22 16:03	08/29/22 15:00	1
Thorium-232	1.88		0.291	0.367		0.236	pCi/g	08/24/22 16:03	08/29/22 15:00	1
Uranium-238	2.98	U	1.48	1.52		3.46	pCi/g	08/24/22 16:03	08/29/22 15:00	1
Radium-228	1.88		0.291	0.367		0.236	pCi/g	08/24/22 16:03	08/29/22 15:00	1
Bismuth-214	1.77		0.303	0.368		0.221	pCi/g	08/24/22 16:03	08/29/22 15:00	1
Actinium-227	0.554	U	1.23	1.24		1.18	pCi/g	08/24/22 16:03	08/29/22 15:00	1
Actinium-228	1.88		0.291	0.367		0.236	pCi/g	08/24/22 16:03	08/29/22 15:00	1
Bismuth-212	0.952	U	1.51	1.51		2.52	pCi/g	08/24/22 16:03	08/29/22 15:00	1
Lead-212	1.74		0.193	0.283		0.185	pCi/g	08/24/22 16:03	08/29/22 15:00	1
Lead-214	1.66		0.209	0.287		0.209	pCi/g	08/24/22 16:03	08/29/22 15:00	1
Potassium-40	15.3		1.83	2.58		0.845	pCi/g	08/24/22 16:03	08/29/22 15:00	1
Protactinium-231	1.71	U	4.70	4.71		13.9	pCi/g	08/24/22 16:03	08/29/22 15:00	1
Thallium-208	0.606		0.102	0.125		0.0627	pCi/g	08/24/22 16:03	08/29/22 15:00	1
Thorium-234	2.98	U	1.48	1.52		3.46	pCi/g	08/24/22 16:03	08/29/22 15:00	1
Uranium-235	0.353	U	1.10	1.10		1.84	pCi/g	08/24/22 16:03	08/29/22 15:00	1

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Building material (Firebrick, Ceramic)

Job ID: 160-46685-1

Client Sample ID: 1st Floor Hall, N-Wall, East End

Lab Sample ID: 160-46685-17

Date Collected: 08/17/22 16:04

Matrix: Solid

Date Received: 08/18/22 08:50

Other Detected Radionuclides		Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Other Detected Radionuclide		None						pCi/g	08/24/22 16:03	08/29/22 15:00	1

Client Sample ID: Gym - East of Stage

Lab Sample ID: 160-46685-18

Date Collected: 08/17/22 16:20

Matrix: Solid

Date Received: 08/18/22 08:50

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.176	U	2.19	2.19	5.00	3.73	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Lead-210	-1.33	U	3.21	3.21		5.51	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Thorium-232	2.04		0.583	0.631		0.467	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Uranium-238	2.67	U	1.86	1.88		4.00	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Radium-228	2.04		0.583	0.631		0.467	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Bismuth-214	2.03		0.339	0.416		0.245	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Actinium-227	0.559	U	0.853	0.856		1.35	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Actinium-228	2.04		0.583	0.631		0.467	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Bismuth-212	2.79		1.10	1.15		0.973	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Lead-212	1.84		0.222	0.312		0.215	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Lead-214	1.78		0.248	0.326		0.256	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Potassium-40	16.2		2.11	2.86		1.05	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Protactinium-231	-3.34	U	10.1	10.2		17.0	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Thallium-208	0.669		0.146	0.166		0.109	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Thorium-234	2.67	U	1.86	1.88		4.00	pCi/g	08/24/22 16:03	08/29/22 14:09	1
Uranium-235	-0.440	U	0.745	0.747		2.03	pCi/g	08/24/22 16:03	08/29/22 14:09	1

Other Detected Radionuclides		Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Other Detected Radionuclide		None						pCi/g	08/24/22 16:03	08/29/22 14:09	1

QC Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Building material (Firebrick, Ceramic)

Job ID: 160-46685-1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Lab Sample ID: MB 160-579355/1-A
Matrix: Solid
Analysis Batch: 579854

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 579355

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
	Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)							
Radium-226	0.8511	U	0.909	0.916	5.00	1.12	pCi/g	08/24/22 16:03	08/29/22 13:00	1	
Lead-210	-1.709	U	1.88	1.89		3.41	pCi/g	08/24/22 16:03	08/29/22 13:00	1	
Thorium-232	-0.02251	U	0.0406	0.0407		0.393	pCi/g	08/24/22 16:03	08/29/22 13:00	1	
Uranium-238	-1.621	U	1.77	1.78		3.33	pCi/g	08/24/22 16:03	08/29/22 13:00	1	
Radium-228	-0.02251	U	0.0406	0.0407		0.393	pCi/g	08/24/22 16:03	08/29/22 13:00	1	
Bismuth-214	0.01992	U	0.0220	0.0222		0.411	pCi/g	08/24/22 16:03	08/29/22 13:00	1	
Actinium-227	0.1937	U	0.244	0.245		0.836	pCi/g	08/24/22 16:03	08/29/22 13:00	1	
Actinium-228	-0.02251	U	0.0406	0.0407		0.393	pCi/g	08/24/22 16:03	08/29/22 13:00	1	
Bismuth-212	-0.01631	U	1.65	1.65		1.50	pCi/g	08/24/22 16:03	08/29/22 13:00	1	
Lead-212	-0.04311	U	0.0911	0.0912		0.209	pCi/g	08/24/22 16:03	08/29/22 13:00	1	
Lead-214	0.06207	U	0.109	0.109		0.154	pCi/g	08/24/22 16:03	08/29/22 13:00	1	
Potassium-40	-0.01961	U	0.466	0.466		0.947	pCi/g	08/24/22 16:03	08/29/22 13:00	1	
Protactinium-231	0.3967	U	1.52	1.52		6.72	pCi/g	08/24/22 16:03	08/29/22 13:00	1	
Thallium-208	0.007746	U	0.0622	0.0622		0.0821	pCi/g	08/24/22 16:03	08/29/22 13:00	1	
Thorium-234	-1.621	U	1.77	1.78		3.33	pCi/g	08/24/22 16:03	08/29/22 13:00	1	
Uranium-235	0.02900	U	0.261	0.261		0.457	pCi/g	08/24/22 16:03	08/29/22 13:00	1	
Other Detected Radionuclides		MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Other Detected Radionuclide		None						pCi/g	08/24/22 16:03	08/29/22 13:00	1

Lab Sample ID: LCS 160-579355/2-A
Matrix: Solid
Analysis Batch: 579855

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 579355

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec Limits
				Uncert. (2σ+/-)					
Americium-241	96.2	92.32		9.69		1.02	pCi/g	96	75 - 125
Cesium-137	25.7	24.57		2.61		0.159	pCi/g	96	75 - 125
Cobalt-60	7.56	7.011		0.747		0.0863	pCi/g	93	75 - 125

Lab Sample ID: 160-46685-18 DU
Matrix: Solid
Analysis Batch: 579852

Client Sample ID: Gym - East of Stage
Prep Type: Total/NA
Prep Batch: 579355

Analyte	Sample		DU	DU	Total	RL	MDC	Unit	RER	RER Limit
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					
Radium-226	0.176	U	4.414		2.12	5.00	2.33	pCi/g	0.98	1
Lead-210	-1.33	U	-0.1350	U	2.51		4.28	pCi/g	0.21	1
Thorium-232	2.04		2.369		0.491		0.350	pCi/g	0.30	1
Uranium-238	2.67	U	2.715	U	1.37		3.05	pCi/g	0.01	1
Radium-228	2.04		2.369		0.491		0.350	pCi/g	0.30	1
Bismuth-214	2.03		1.734		0.369		0.210	pCi/g	0.38	1
Actinium-227	0.559	U	0.7267	U	1.50		1.14	pCi/g	0.07	1
Actinium-228	2.04		2.369		0.491		0.350	pCi/g	0.30	1
Bismuth-212	2.79		0.4833	U	1.48		2.55	pCi/g	0.88	1
Lead-212	1.84		1.733		0.285		0.165	pCi/g	0.19	1

Eurofins St. Louis

QC Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Building material (Firebrick, Ceramic)

Job ID: 160-46685-1

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS) (Continued)

Lab Sample ID: 160-46685-18 DU
Matrix: Solid
Analysis Batch: 579852

Client Sample ID: Gym - East of Stage
Prep Type: Total/NA
Prep Batch: 579355

Analyte	Sample	Sample	DU	DU	Total	RL	MDC	Unit	RER	RER	Limit
	Result	Qual	Result	Qual	Uncert. (2σ+/-)						
Lead-214	1.78		1.847		0.315		0.214	pCi/g	0.11		1
Potassium-40	16.2		13.92		2.64		0.888	pCi/g	0.41		1
Protactinium-231	-3.34	U	-2.236	U	9.15		15.3	pCi/g	0.06		1
Thallium-208	0.669		0.7687		0.166		0.0855	pCi/g	0.30		1
Thorium-234	2.67	U	2.715	U	1.37		3.05	pCi/g	0.01		1
Uranium-235	-0.440	U	0.2252	U	0.612		1.03	pCi/g	0.49		1
Total											
Other Detected Radionuclides	Sample Result	Sample Qual	DU Result	DU Qual	Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER	Limit
Other Detected Radionuclide	None		None					pCi/g			



QC Association Summary

Client: Wood E&I Solutions Inc
 Project/Site: Building material (Firebrick, Ceramic)

Job ID: 160-46685-1

Rad

Leach Batch: 578916

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-46685-1	East Brown Brick	Total/NA	Solid	Dry and Grind	
160-46685-2	South Brown Brick	Total/NA	Solid	Dry and Grind	
160-46685-3	West Brown Brick	Total/NA	Solid	Dry and Grind	
160-46685-4	East White Brick	Total/NA	Solid	Dry and Grind	
160-46685-5	South White Brick	Total/NA	Solid	Dry and Grind	
160-46685-6	West White Brick	Total/NA	Solid	Dry and Grind	
160-46685-7	NW Restroom - East Wall	Total/NA	Solid	Dry and Grind	
160-46685-8	NW Restroom - North Wall	Total/NA	Solid	Dry and Grind	
160-46685-9	SW Restroom - North Wall	Total/NA	Solid	Dry and Grind	
160-46685-10	SW Restroom - West Wall	Total/NA	Solid	Dry and Grind	
160-46685-11	SE Restroom - North Wall	Total/NA	Solid	Dry and Grind	
160-46685-12	SE Restroom - West Wall	Total/NA	Solid	Dry and Grind	
160-46685-13	Boiler Door Liner	Total/NA	Solid	Dry and Grind	
160-46685-14	2nd Floor Hall, N-Wall, East End	Total/NA	Solid	Dry and Grind	
160-46685-15	2nd Floor Hall, S-Wall, West end	Total/NA	Solid	Dry and Grind	
160-46685-16	1st Floor Hall, S-Wall, West End	Total/NA	Solid	Dry and Grind	
160-46685-17	1st Floor Hall, N-Wall, East End	Total/NA	Solid	Dry and Grind	
160-46685-18	Gym - East of Stage	Total/NA	Solid	Dry and Grind	
160-46685-18 DU	Gym - East of Stage	Total/NA	Solid	Dry and Grind	

Prep Batch: 579355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-46685-1	East Brown Brick	Total/NA	Solid	Fill_Geo-0	578916
160-46685-2	South Brown Brick	Total/NA	Solid	Fill_Geo-0	578916
160-46685-3	West Brown Brick	Total/NA	Solid	Fill_Geo-0	578916
160-46685-4	East White Brick	Total/NA	Solid	Fill_Geo-0	578916
160-46685-5	South White Brick	Total/NA	Solid	Fill_Geo-0	578916
160-46685-6	West White Brick	Total/NA	Solid	Fill_Geo-0	578916
160-46685-7	NW Restroom - East Wall	Total/NA	Solid	Fill_Geo-0	578916
160-46685-8	NW Restroom - North Wall	Total/NA	Solid	Fill_Geo-0	578916
160-46685-9	SW Restroom - North Wall	Total/NA	Solid	Fill_Geo-0	578916
160-46685-10	SW Restroom - West Wall	Total/NA	Solid	Fill_Geo-0	578916
160-46685-11	SE Restroom - North Wall	Total/NA	Solid	Fill_Geo-0	578916
160-46685-12	SE Restroom - West Wall	Total/NA	Solid	Fill_Geo-0	578916
160-46685-13	Boiler Door Liner	Total/NA	Solid	Fill_Geo-0	578916
160-46685-14	2nd Floor Hall, N-Wall, East End	Total/NA	Solid	Fill_Geo-0	578916
160-46685-15	2nd Floor Hall, S-Wall, West end	Total/NA	Solid	Fill_Geo-0	578916
160-46685-16	1st Floor Hall, S-Wall, West End	Total/NA	Solid	Fill_Geo-0	578916
160-46685-17	1st Floor Hall, N-Wall, East End	Total/NA	Solid	Fill_Geo-0	578916
160-46685-18	Gym - East of Stage	Total/NA	Solid	Fill_Geo-0	578916
MB 160-579355/1-A	Method Blank	Total/NA	Solid	Fill_Geo-0	
LCS 160-579355/2-A	Lab Control Sample	Total/NA	Solid	Fill_Geo-0	
160-46685-18 DU	Gym - East of Stage	Total/NA	Solid	Fill_Geo-0	578916

September 6, 2022

Via email

Mary E. Jank, P.G
Wood E&I Solutions Inc
8745 W Higgins Rd
Chicago, IL 60631

Dear Ms. Jank,

This correspondence is in response to your request sent to the Illinois Emergency Management Agency regarding the disposal of building materials containing refractory brick. Analytical data dated August 30, 2022 indicates the brick contains an average combined radium (radium-226 and radium-228) concentration of 6.9 pCi/g and an average potassium-40 concentration of 11.4 pCi/g. Based upon review of the analysis submitted, the material in question contains naturally occurring radioactive material (NORM) and can be disposed of without regards to its radioactivity.

The Agency authorizes the disposal of the building materials containing refractory brick in a landfill permitted by the Illinois Environmental Protection Agency (IEPA) to accept such material. The materials must meet all other waste acceptance criteria for the landfill. Nothing in this approval negates or supersedes any provision of the landfill's IEPA permit.

Any questions concerning this correspondence may be directed to me at 217-786-6073 or at Cheryl.L.Head@illinois.gov.

Respectfully,

A handwritten signature in black ink that reads "Cheryl Head". The signature is written in a cursive style with a large initial "C".

Cheryl Head, NS Health Physics Tech II
Radiological Field Services Unit
Illinois Emergency Management Agency

Cc: K. Horn/IEMA

ATTACHMENT B

PCBs in CAULK LABORATORY REPORT



ANALYTICAL REPORT

Eurofins Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-221045-1
Client Project/Site: Harrison School

For:

Wood E&I Solutions Inc
8745 West Higgins Road
Suite 300
Chicago, Illinois 60631

Attn: Ms. Mary E. Jank



Authorized for release by:
9/2/2022 10:10:08 AM

Richard Wright, Senior Project Manager
(708)746-0045

Richard.Wright@et.eurofinsus.com

LINKS

Review your project
results through



Have a Question?



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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

435
Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Wood E&I Solutions Inc
Project/Site: Harrison School

Job ID: 500-221045-1

Job ID: 500-221045-1

Laboratory: Eurofins Chicago

Narrative

**Job Narrative
500-221045-1**

Receipt

The samples were received on 8/18/2022 9:40 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 20.2° C.

Receipt Exceptions

The container label for the following sample(s) did not match the information listed on the Chain-of-Custody (COC) Sample #1 COC list sample ID as "North East Caulk" however container label list sample ID as "East Window Caulk". Logged per COC.

GC Semi VOA

Method 8082A: Surrogate DCB Decachlorobiphenyl recovery for the following samples were outside control limits: North East Caulk (500-221045-1), North Caulk (500-221045-2), South Caulk (500-221045-4), (LCS 500-672354/3-A) and (MB 500-672354/1-A). The other surrogate was within limits; therefore, re-analysis was not performed.

Method 8082A: Surrogate DCB Decachlorobiphenyl recovery for the following sample was outside control limits: West Caulk (500-221045-3). The other surrogate was within limits; therefore, re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: Harrison School

Job ID: 500-221045-1

Client Sample ID: North East Caulk

Lab Sample ID: 500-221045-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	2100		230	110	ug/Kg	1		8082A	Total/NA

Client Sample ID: North Caulk

Lab Sample ID: 500-221045-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	1200		220	100	ug/Kg	1		8082A	Total/NA

Client Sample ID: West Caulk

Lab Sample ID: 500-221045-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	10000		1900	650	ug/Kg	10		8082A	Total/NA

Client Sample ID: South Caulk

Lab Sample ID: 500-221045-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	1300		170	57	ug/Kg	1		8082A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

Method Summary

Client: Wood E&I Solutions Inc
Project/Site: Harrison School

Job ID: 500-221045-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
3541	Automated Soxhlet Extraction	SW846	EET CHI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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Sample Summary

Client: Wood E&I Solutions Inc
Project/Site: Harrison School

Job ID: 500-221045-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-221045-1	North East Caulk	Solid	08/17/22 07:11	08/18/22 09:40
500-221045-2	North Caulk	Solid	08/17/22 07:20	08/18/22 09:40
500-221045-3	West Caulk	Solid	08/17/22 07:35	08/18/22 09:40
500-221045-4	South Caulk	Solid	08/17/22 07:44	08/18/22 09:40

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Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Harrison School

Job ID: 500-221045-1

Client Sample ID: North East Caulk

Lab Sample ID: 500-221045-1

Date Collected: 08/17/22 07:11

Matrix: Solid

Date Received: 08/18/22 09:40

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<230		230	89	ug/Kg		08/30/22 13:43	08/31/22 11:22	1
PCB-1221	<230		230	89	ug/Kg		08/30/22 13:43	08/31/22 11:22	1
PCB-1232	<230		230	61	ug/Kg		08/30/22 13:43	08/31/22 11:22	1
PCB-1242	<230		230	88	ug/Kg		08/30/22 13:43	08/31/22 11:22	1
PCB-1248	2100		230	110	ug/Kg		08/30/22 13:43	08/31/22 11:22	1
PCB-1254	<230		230	77	ug/Kg		08/30/22 13:43	08/31/22 11:22	1
PCB-1260	<230		230	85	ug/Kg		08/30/22 13:43	08/31/22 11:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	128		49 - 129	08/30/22 13:43	08/31/22 11:22	1
DCB Decachlorobiphenyl	833	S1+	37 - 121	08/30/22 13:43	08/31/22 11:22	1

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Harrison School

Job ID: 500-221045-1

Client Sample ID: North Caulk

Lab Sample ID: 500-221045-2

Date Collected: 08/17/22 07:20

Matrix: Solid

Date Received: 08/18/22 09:40

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<220		220	87	ug/Kg		08/30/22 13:43	08/31/22 11:36	1
PCB-1221	<220		220	87	ug/Kg		08/30/22 13:43	08/31/22 11:36	1
PCB-1232	<220		220	60	ug/Kg		08/30/22 13:43	08/31/22 11:36	1
PCB-1242	<220		220	86	ug/Kg		08/30/22 13:43	08/31/22 11:36	1
PCB-1248	1200		220	100	ug/Kg		08/30/22 13:43	08/31/22 11:36	1
PCB-1254	<220		220	75	ug/Kg		08/30/22 13:43	08/31/22 11:36	1
PCB-1260	<220		220	83	ug/Kg		08/30/22 13:43	08/31/22 11:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	82		49 - 129	08/30/22 13:43	08/31/22 11:36	1
DCB Decachlorobiphenyl	820	S1+	37 - 121	08/30/22 13:43	08/31/22 11:36	1

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Harrison School

Job ID: 500-221045-1

Client Sample ID: West Caulk

Lab Sample ID: 500-221045-3

Date Collected: 08/17/22 07:35

Matrix: Solid

Date Received: 08/18/22 09:40

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<1900		1900	750	ug/Kg		08/30/22 13:43	09/01/22 10:47	10
PCB-1221	<1900		1900	750	ug/Kg		08/30/22 13:43	09/01/22 10:47	10
PCB-1232	<1900		1900	520	ug/Kg		08/30/22 13:43	09/01/22 10:47	10
PCB-1242	<1900		1900	740	ug/Kg		08/30/22 13:43	09/01/22 10:47	10
PCB-1248	<1900		1900	900	ug/Kg		08/30/22 13:43	09/01/22 10:47	10
PCB-1254	10000		1900	650	ug/Kg		08/30/22 13:43	09/01/22 10:47	10
PCB-1260	<1900		1900	720	ug/Kg		08/30/22 13:43	09/01/22 10:47	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	107		49 - 129	08/30/22 13:43	09/01/22 10:47	10
DCB Decachlorobiphenyl	133	S1+	37 - 121	08/30/22 13:43	09/01/22 10:47	10

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Harrison School

Job ID: 500-221045-1

Client Sample ID: South Caulk

Lab Sample ID: 500-221045-4

Date Collected: 08/17/22 07:44

Matrix: Solid

Date Received: 08/18/22 09:40

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<170		170	66	ug/Kg		08/30/22 13:43	08/31/22 12:06	1
PCB-1221	<170		170	66	ug/Kg		08/30/22 13:43	08/31/22 12:06	1
PCB-1232	<170		170	46	ug/Kg		08/30/22 13:43	08/31/22 12:06	1
PCB-1242	<170		170	66	ug/Kg		08/30/22 13:43	08/31/22 12:06	1
PCB-1248	<170		170	80	ug/Kg		08/30/22 13:43	08/31/22 12:06	1
PCB-1254	1300		170	57	ug/Kg		08/30/22 13:43	08/31/22 12:06	1
PCB-1260	<170		170	64	ug/Kg		08/30/22 13:43	08/31/22 12:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	102		49 - 129	08/30/22 13:43	08/31/22 12:06	1
DCB Decachlorobiphenyl	125	S1+	37 - 121	08/30/22 13:43	08/31/22 12:06	1

Definitions/Glossary

Client: Wood E&I Solutions Inc
Project/Site: Harrison School

Job ID: 500-221045-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: Wood E&I Solutions Inc
Project/Site: Harrison School

Job ID: 500-221045-1

GC Semi VOA

Prep Batch: 672354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221045-1	North East Caulk	Total/NA	Solid	3541	
500-221045-2	North Caulk	Total/NA	Solid	3541	
500-221045-3	West Caulk	Total/NA	Solid	3541	
500-221045-4	South Caulk	Total/NA	Solid	3541	
MB 500-672354/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-672354/3-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 672528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221045-1	North East Caulk	Total/NA	Solid	8082A	672354
500-221045-2	North Caulk	Total/NA	Solid	8082A	672354
500-221045-4	South Caulk	Total/NA	Solid	8082A	672354
MB 500-672354/1-A	Method Blank	Total/NA	Solid	8082A	672354
LCS 500-672354/3-A	Lab Control Sample	Total/NA	Solid	8082A	672354

Analysis Batch: 672688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221045-3	West Caulk	Total/NA	Solid	8082A	672354

Surrogate Summary

Client: Wood E&I Solutions Inc
Project/Site: Harrison School

Job ID: 500-221045-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1	DCBP1
		(49-129)	(37-121)
500-221045-1	North East Caulk	128	833 S1+
500-221045-2	North Caulk	82	820 S1+
500-221045-3	West Caulk	107	133 S1+
500-221045-4	South Caulk	102	125 S1+
LCS 500-672354/3-A	Lab Control Sample	109	146 S1+
MB 500-672354/1-A	Method Blank	112	137 S1+

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

QC Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Harrison School

Job ID: 500-221045-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 500-672354/1-A
Matrix: Solid
Analysis Batch: 672528

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 672354

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<17		17	6.6	ug/Kg		08/30/22 13:43	08/31/22 10:37	1
PCB-1221	<17		17	6.6	ug/Kg		08/30/22 13:43	08/31/22 10:37	1
PCB-1232	<17		17	4.5	ug/Kg		08/30/22 13:43	08/31/22 10:37	1
PCB-1242	<17		17	6.5	ug/Kg		08/30/22 13:43	08/31/22 10:37	1
PCB-1248	<17		17	7.9	ug/Kg		08/30/22 13:43	08/31/22 10:37	1
PCB-1254	<17		17	5.7	ug/Kg		08/30/22 13:43	08/31/22 10:37	1
PCB-1260	<17		17	6.3	ug/Kg		08/30/22 13:43	08/31/22 10:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	112		49 - 129	08/30/22 13:43	08/31/22 10:37	1
<i>DCB Decachlorobiphenyl</i>	137	S1+	37 - 121	08/30/22 13:43	08/31/22 10:37	1

Lab Sample ID: LCS 500-672354/3-A
Matrix: Solid
Analysis Batch: 672528

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 672354

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	167	175		ug/Kg		105	57 - 120
PCB-1260	167	194		ug/Kg		116	61 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>Tetrachloro-m-xylene</i>	109		49 - 129
<i>DCB Decachlorobiphenyl</i>	146	S1+	37 - 121

Lab Chronicle

Client: Wood E&I Solutions Inc
Project/Site: Harrison School

Job ID: 500-221045-1

Client Sample ID: North East Caulk

Lab Sample ID: 500-221045-1

Date Collected: 08/17/22 07:11

Matrix: Solid

Date Received: 08/18/22 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672354	EK	EET CHI	08/30/22 13:43 - 08/30/22 19:00 ¹
Total/NA	Analysis	8082A		1	672528	SS	EET CHI	08/31/22 11:22

Client Sample ID: North Caulk

Lab Sample ID: 500-221045-2

Date Collected: 08/17/22 07:20

Matrix: Solid

Date Received: 08/18/22 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672354	EK	EET CHI	08/30/22 13:43 - 08/30/22 19:00 ¹
Total/NA	Analysis	8082A		1	672528	SS	EET CHI	08/31/22 11:36

Client Sample ID: West Caulk

Lab Sample ID: 500-221045-3

Date Collected: 08/17/22 07:35

Matrix: Solid

Date Received: 08/18/22 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672354	EK	EET CHI	08/30/22 13:43 - 08/30/22 19:00 ¹
Total/NA	Analysis	8082A		10	672688	SS	EET CHI	09/01/22 10:47

Client Sample ID: South Caulk

Lab Sample ID: 500-221045-4

Date Collected: 08/17/22 07:44

Matrix: Solid

Date Received: 08/18/22 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672354	EK	EET CHI	08/30/22 13:43 - 08/30/22 19:00 ¹
Total/NA	Analysis	8082A		1	672528	SS	EET CHI	08/31/22 12:06

¹ Completion dates and times are reported or not reported per method requirements or individual lab discretion.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Wood E&I Solutions Inc
Project/Site: Harrison School

Job ID: 500-221045-1

Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

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Chain of Custody Record

538776




Environment Testing
TestAmerica

TAL-8210

Address _____

Regulatory Program: DW NPDES RCRA Other

Client Contact		Project Manager: MIKE HOFFMAN		Site Contact: MCNALLY		Date: 8-17-22		COC No: 1	
Company Name: WOOD		Tel/Email: 309-696-7875		Lab Contact: WRIGHT		Carrier:		of COCs	
Address: 2412 W NEBRAUKA		Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Filtered Sample (Y/N) Perform MS/MSD (Y/N) PCB		 500-221045 COC		Sampler	
City/State/Zip: PEORIA IL 61604								For Lab Use Only	
Phone: 309-253-2169								Walk-in Client	
Fax:								Lab Sampling	
Project Name: CITY OF PEORIA						Job / SDG No:			
Site: HARRISON SCHOOL								500-221045	
PO #:									
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Sample Specific Notes
1	NORTH EAST CAVIK	8/17/22	0711	G	CAVIK	1	X		
2	NORTH CAVIK		0720	G		1	X		
3	WEST CAVIK		0735	G		1	X		
4	SOUTH CAVIK		0744	G		1	X		
Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other									
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
<input type="checkbox"/> Non Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown						<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months			
Special Instructions/QC Requirements & Comments:									
20.5+20.2									
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temp (°C) Obs'd		Corr'd		Therm ID No	
Relinquished by: <i>[Signature]</i>		Company: WOOD		Date/Time: 8-17-22 1800		Received by:		Date/Time:	
Relinquished by:		Company:		Date/Time:		Received by:		Date/Time:	
Relinquished by:		Company:		Date/Time:		Received in Laboratory by: Stephanie Hernandez		Date/Time: 8/18/22 0940	

Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 500-221045-1

Login Number: 221045

List Source: Eurofins Chicago

List Number: 1

Creator: Hernandez, Stephanie

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	
Cooler Temperature is acceptable.	False	
Cooler Temperature is recorded.	True	20.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ATTACHMENT C

PCBs and METALS in PAINT LABORATORY REPORT



ANALYTICAL REPORT

Eurofins Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-221200-1
Client Project/Site: Harrison School

For:

Wood E&I Solutions Inc
8745 West Higgins Road
Suite 300
Chicago, Illinois 60631

Attn: Ms. Mary E. Jank



Authorized for release by:
9/7/2022 3:59:44 PM

Richard Wright, Senior Project Manager
(708)746-0045

Richard.Wright@et.eurofinsus.com

LINKS

Review your project
results through



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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

454
Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Wood E&I Solutions Inc
Project/Site: Harrison School

Job ID: 500-221200-1

Job ID: 500-221200-1

Laboratory: Eurofins Chicago

Narrative

Job Narrative 500-221200-1

Receipt

The samples were received on 8/23/2022 10:25 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.8° C.

GC Semi VOA

Method 8082A: The continuing calibration verification (CCVIS) was outside of the control limits for Tetrachloro-m-xylene for analytical batch 500-672934. The CCVIS recoveries of the target analytes and the other surrogate DCB Decachlorobiphenyl were within the control limits; therefore the data has been reported. (CCVIS 500-672934/3)

Method 8082A: The following sample required a dilution due to the nature of the sample matrix: Brown-SW Door Frame (500-221200-2). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method 8082A: Surrogate DCB Decachlorobiphenyl recovery for the following samples were outside control limits: Grey-North Basement Room (500-221200-5), Blue-SE Basement RR (500-221200-6), Green-NE Classr. 1st Fl (500-221200-7), Red 3rd Fl Cloak Rm (500-221200-8), Black-NW Stairs Handr. (500-221200-9) and (500-221200-A-3-B MS). The other surrogate was within limits; therefore, re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: Harrison School

Job ID: 500-221200-1

Client Sample ID: Beige-North Foyer

Lab Sample ID: 500-221200-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	960		130	43	ug/Kg	1		8082A	Total/NA

Client Sample ID: Brown-SW Door Frame

Lab Sample ID: 500-221200-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	50000		8900	3000	ug/Kg	40		8082A	Total/NA

Client Sample ID: Yellow NW Basement Hall

Lab Sample ID: 500-221200-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	14000		2100	710	ug/Kg	10		8082A	Total/NA

Client Sample ID: White-West Basement Room

Lab Sample ID: 500-221200-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	2200		400	130	ug/Kg	2		8082A	Total/NA

Client Sample ID: Grey-North Basement Room

Lab Sample ID: 500-221200-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	15000		2000	670	ug/Kg	10		8082A	Total/NA

Client Sample ID: Blue-SE Basement RR

Lab Sample ID: 500-221200-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	14000		1800	610	ug/Kg	10		8082A	Total/NA

Client Sample ID: Green-NE Classr. 1st FI

Lab Sample ID: 500-221200-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	3900		480	160	ug/Kg	2		8082A	Total/NA

Client Sample ID: Red 3rd FI Cloak Rm

Lab Sample ID: 500-221200-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	3800		790	270	ug/Kg	5		8082A	Total/NA

Client Sample ID: Black-NW Stairs Handr.

Lab Sample ID: 500-221200-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	7700		1300	430	ug/Kg	10		8082A	Total/NA

Client Sample ID: Comp Paint Sample

Lab Sample ID: 500-221200-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.26		0.050	0.010	mg/L	1		6010C	TCLP
Barium	0.12	J	0.50	0.050	mg/L	1		6010C	TCLP
Cadmium	0.11		0.0050	0.0020	mg/L	1		6010C	TCLP
Chromium	0.039		0.025	0.010	mg/L	1		6010C	TCLP
Lead	17		0.050	0.0075	mg/L	1		6010C	TCLP
Mercury	0.34		0.20	0.20	ug/L	1		7470A	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

Method Summary

Client: Wood E&I Solutions Inc
Project/Site: Harrison School

Job ID: 500-221200-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
6010C	Metals (ICP)	SW846	EET CHI
7470A	Mercury (CVAA)	SW846	EET CHI
1311	TCLP Extraction	SW846	EET CHI
3010A	Preparation, Total Metals	SW846	EET CHI
3541	Automated Soxhlet Extraction	SW846	EET CHI
7470A	Preparation, Mercury	SW846	EET CHI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



Sample Summary

Client: Wood E&I Solutions Inc
Project/Site: Harrison School

Job ID: 500-221200-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-221200-1	Beige-North Foyer	Solid	08/22/22 07:25	08/23/22 10:25
500-221200-2	Brown-SW Door Frame	Solid	08/22/22 09:10	08/23/22 10:25
500-221200-3	Yellow NW Basement Hall	Solid	08/22/22 09:48	08/23/22 10:25
500-221200-4	White-West Basement Room	Solid	08/22/22 10:02	08/23/22 10:25
500-221200-5	Grey-North Basement Room	Solid	08/22/22 10:20	08/23/22 10:25
500-221200-6	Blue-SE Basement RR	Solid	08/22/22 10:43	08/23/22 10:25
500-221200-7	Green-NE Classr. 1st Fl	Solid	08/22/22 11:35	08/23/22 10:25
500-221200-8	Red 3rd Fl Cloak Rm	Solid	08/22/22 13:15	08/23/22 10:25
500-221200-9	Black-NW Stairs Handr.	Solid	08/22/22 14:15	08/23/22 10:25
500-221200-10	Comp Paint Sample	Solid	08/22/22 17:40	08/23/22 10:25

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Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Harrison School

Job ID: 500-221200-1

Client Sample ID: Beige-North Foyer

Lab Sample ID: 500-221200-1

Date Collected: 08/22/22 07:25

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<130		130	49	ug/Kg		09/01/22 14:19	09/02/22 13:56	1
PCB-1221	<130		130	49	ug/Kg		09/01/22 14:19	09/02/22 13:56	1
PCB-1232	<130		130	34	ug/Kg		09/01/22 14:19	09/02/22 13:56	1
PCB-1242	<130		130	49	ug/Kg		09/01/22 14:19	09/02/22 13:56	1
PCB-1248	<130		130	60	ug/Kg		09/01/22 14:19	09/02/22 13:56	1
PCB-1254	960		130	43	ug/Kg		09/01/22 14:19	09/02/22 13:56	1
PCB-1260	<130		130	47	ug/Kg		09/01/22 14:19	09/02/22 13:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	108		49 - 129	09/01/22 14:19	09/02/22 13:56	1
DCB Decachlorobiphenyl	98		37 - 121	09/01/22 14:19	09/02/22 13:56	1

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Harrison School

Job ID: 500-221200-1

Client Sample ID: Brown-SW Door Frame

Lab Sample ID: 500-221200-2

Date Collected: 08/22/22 09:10

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<8900		8900	3500	ug/Kg		09/01/22 14:19	09/04/22 12:00	40
PCB-1221	<8900		8900	3500	ug/Kg		09/01/22 14:19	09/04/22 12:00	40
PCB-1232	<8900		8900	2400	ug/Kg		09/01/22 14:19	09/04/22 12:00	40
PCB-1242	<8900		8900	3500	ug/Kg		09/01/22 14:19	09/04/22 12:00	40
PCB-1248	<8900		8900	4200	ug/Kg		09/01/22 14:19	09/04/22 12:00	40
PCB-1254	50000		8900	3000	ug/Kg		09/01/22 14:19	09/04/22 12:00	40
PCB-1260	<8900		8900	3400	ug/Kg		09/01/22 14:19	09/04/22 12:00	40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	D	49 - 129	09/01/22 14:19	09/04/22 12:00	40
DCB Decachlorobiphenyl	0	D	37 - 121	09/01/22 14:19	09/04/22 12:00	40

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Harrison School

Job ID: 500-221200-1

Client Sample ID: Yellow NW Basement Hall

Lab Sample ID: 500-221200-3

Date Collected: 08/22/22 09:48

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<2100	F1	2100	820	ug/Kg		09/01/22 14:19	09/04/22 09:47	10
PCB-1221	<2100		2100	820	ug/Kg		09/01/22 14:19	09/04/22 09:47	10
PCB-1232	<2100		2100	570	ug/Kg		09/01/22 14:19	09/04/22 09:47	10
PCB-1242	<2100		2100	810	ug/Kg		09/01/22 14:19	09/04/22 09:47	10
PCB-1248	<2100		2100	990	ug/Kg		09/01/22 14:19	09/04/22 09:47	10
PCB-1254	14000		2100	710	ug/Kg		09/01/22 14:19	09/04/22 09:47	10
PCB-1260	<2100	F1	2100	790	ug/Kg		09/01/22 14:19	09/04/22 09:47	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	104		49 - 129	09/01/22 14:19	09/04/22 09:47	10
DCB Decachlorobiphenyl	114		37 - 121	09/01/22 14:19	09/04/22 09:47	10

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Harrison School

Job ID: 500-221200-1

Client Sample ID: White-West Basement Room

Lab Sample ID: 500-221200-4

Date Collected: 08/22/22 10:02

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<400		400	160	ug/Kg		09/01/22 14:19	09/04/22 10:31	2
PCB-1221	<400		400	160	ug/Kg		09/01/22 14:19	09/04/22 10:31	2
PCB-1232	<400		400	110	ug/Kg		09/01/22 14:19	09/04/22 10:31	2
PCB-1242	<400		400	150	ug/Kg		09/01/22 14:19	09/04/22 10:31	2
PCB-1248	<400		400	190	ug/Kg		09/01/22 14:19	09/04/22 10:31	2
PCB-1254	2200		400	130	ug/Kg		09/01/22 14:19	09/04/22 10:31	2
PCB-1260	<400		400	150	ug/Kg		09/01/22 14:19	09/04/22 10:31	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	104		49 - 129	09/01/22 14:19	09/04/22 10:31	2
DCB Decachlorobiphenyl	100		37 - 121	09/01/22 14:19	09/04/22 10:31	2

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Harrison School

Job ID: 500-221200-1

Client Sample ID: Grey-North Basement Room

Lab Sample ID: 500-221200-5

Date Collected: 08/22/22 10:20

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<2000		2000	780	ug/Kg		09/01/22 14:19	09/04/22 10:46	10
PCB-1221	<2000		2000	780	ug/Kg		09/01/22 14:19	09/04/22 10:46	10
PCB-1232	<2000		2000	540	ug/Kg		09/01/22 14:19	09/04/22 10:46	10
PCB-1242	<2000		2000	770	ug/Kg		09/01/22 14:19	09/04/22 10:46	10
PCB-1248	<2000		2000	940	ug/Kg		09/01/22 14:19	09/04/22 10:46	10
PCB-1254	15000		2000	670	ug/Kg		09/01/22 14:19	09/04/22 10:46	10
PCB-1260	<2000		2000	750	ug/Kg		09/01/22 14:19	09/04/22 10:46	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	125		49 - 129	09/01/22 14:19	09/04/22 10:46	10
DCB Decachlorobiphenyl	173	S1+	37 - 121	09/01/22 14:19	09/04/22 10:46	10

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Harrison School

Job ID: 500-221200-1

Client Sample ID: Blue-SE Basement RR

Lab Sample ID: 500-221200-6

Date Collected: 08/22/22 10:43

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<1800		1800	710	ug/Kg		09/01/22 14:19	09/04/22 12:15	10
PCB-1221	<1800		1800	710	ug/Kg		09/01/22 14:19	09/04/22 12:15	10
PCB-1232	<1800		1800	490	ug/Kg		09/01/22 14:19	09/04/22 12:15	10
PCB-1242	<1800		1800	700	ug/Kg		09/01/22 14:19	09/04/22 12:15	10
PCB-1248	<1800		1800	860	ug/Kg		09/01/22 14:19	09/04/22 12:15	10
PCB-1254	14000		1800	610	ug/Kg		09/01/22 14:19	09/04/22 12:15	10
PCB-1260	<1800		1800	680	ug/Kg		09/01/22 14:19	09/04/22 12:15	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	123		49 - 129	09/01/22 14:19	09/04/22 12:15	10
DCB Decachlorobiphenyl	159	S1+	37 - 121	09/01/22 14:19	09/04/22 12:15	10

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Harrison School

Job ID: 500-221200-1

Client Sample ID: Green-NE Classr. 1st FI

Lab Sample ID: 500-221200-7

Date Collected: 08/22/22 11:35

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<480		480	190	ug/Kg		09/01/22 14:19	09/04/22 12:30	2
PCB-1221	<480		480	190	ug/Kg		09/01/22 14:19	09/04/22 12:30	2
PCB-1232	<480		480	130	ug/Kg		09/01/22 14:19	09/04/22 12:30	2
PCB-1242	<480		480	190	ug/Kg		09/01/22 14:19	09/04/22 12:30	2
PCB-1248	<480		480	230	ug/Kg		09/01/22 14:19	09/04/22 12:30	2
PCB-1254	3900		480	160	ug/Kg		09/01/22 14:19	09/04/22 12:30	2
PCB-1260	<480		480	180	ug/Kg		09/01/22 14:19	09/04/22 12:30	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	96		49 - 129	09/01/22 14:19	09/04/22 12:30	2
DCB Decachlorobiphenyl	810	S1+	37 - 121	09/01/22 14:19	09/04/22 12:30	2

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Harrison School

Job ID: 500-221200-1

Client Sample ID: Red 3rd FI Cloak Rm

Lab Sample ID: 500-221200-8

Date Collected: 08/22/22 13:15

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<790		790	310	ug/Kg		09/01/22 14:19	09/04/22 12:45	5
PCB-1221	<790		790	310	ug/Kg		09/01/22 14:19	09/04/22 12:45	5
PCB-1232	<790		790	220	ug/Kg		09/01/22 14:19	09/04/22 12:45	5
PCB-1242	<790		790	310	ug/Kg		09/01/22 14:19	09/04/22 12:45	5
PCB-1248	<790		790	380	ug/Kg		09/01/22 14:19	09/04/22 12:45	5
PCB-1254	3800		790	270	ug/Kg		09/01/22 14:19	09/04/22 12:45	5
PCB-1260	<790		790	300	ug/Kg		09/01/22 14:19	09/04/22 12:45	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	118		49 - 129	09/01/22 14:19	09/04/22 12:45	5
DCB Decachlorobiphenyl	135	S1+	37 - 121	09/01/22 14:19	09/04/22 12:45	5

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Harrison School

Job ID: 500-221200-1

Client Sample ID: Black-NW Stairs Handr.

Lab Sample ID: 500-221200-9

Date Collected: 08/22/22 14:15

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<1300		1300	490	ug/Kg		09/01/22 14:19	09/04/22 12:59	10
PCB-1221	<1300		1300	490	ug/Kg		09/01/22 14:19	09/04/22 12:59	10
PCB-1232	<1300		1300	340	ug/Kg		09/01/22 14:19	09/04/22 12:59	10
PCB-1242	<1300		1300	490	ug/Kg		09/01/22 14:19	09/04/22 12:59	10
PCB-1248	<1300		1300	600	ug/Kg		09/01/22 14:19	09/04/22 12:59	10
PCB-1254	7700		1300	430	ug/Kg		09/01/22 14:19	09/04/22 12:59	10
PCB-1260	<1300		1300	470	ug/Kg		09/01/22 14:19	09/04/22 12:59	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	121		49 - 129	09/01/22 14:19	09/04/22 12:59	10
DCB Decachlorobiphenyl	156	S1+	37 - 121	09/01/22 14:19	09/04/22 12:59	10

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Harrison School

Job ID: 500-221200-1

Client Sample ID: Comp Paint Sample

Lab Sample ID: 500-221200-10

Date Collected: 08/22/22 17:40

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.26		0.050	0.010	mg/L		09/02/22 16:59	09/06/22 22:09	1
Barium	0.12	J	0.50	0.050	mg/L		09/02/22 16:59	09/06/22 22:09	1
Cadmium	0.11		0.0050	0.0020	mg/L		09/02/22 16:59	09/06/22 22:09	1
Chromium	0.039		0.025	0.010	mg/L		09/02/22 16:59	09/06/22 22:09	1
Lead	17		0.050	0.0075	mg/L		09/02/22 16:59	09/06/22 22:09	1
Selenium	<0.050		0.050	0.020	mg/L		09/02/22 16:59	09/06/22 22:09	1
Silver	<0.025		0.025	0.010	mg/L		09/02/22 16:59	09/06/22 22:09	1

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.34		0.20	0.20	ug/L		09/06/22 11:15	09/07/22 10:54	1

Definitions/Glossary

Client: Wood E&I Solutions Inc
Project/Site: Harrison School

Job ID: 500-221200-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: Wood E&I Solutions Inc
Project/Site: Harrison School

Job ID: 500-221200-1

GC Semi VOA

Prep Batch: 672813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221200-1	Beige-North Foyer	Total/NA	Solid	3541	
500-221200-2	Brown-SW Door Frame	Total/NA	Solid	3541	
500-221200-3	Yellow NW Basement Hall	Total/NA	Solid	3541	
500-221200-4	White-West Basement Room	Total/NA	Solid	3541	
500-221200-5	Grey-North Basement Room	Total/NA	Solid	3541	
500-221200-6	Blue-SE Basement RR	Total/NA	Solid	3541	
500-221200-7	Green-NE Classr. 1st FI	Total/NA	Solid	3541	
500-221200-8	Red 3rd FI Cloak Rm	Total/NA	Solid	3541	
500-221200-9	Black-NW Stairs Handr.	Total/NA	Solid	3541	
MB 500-672813/20-A	Method Blank	Total/NA	Solid	3541	
LCS 500-672813/21-A	Lab Control Sample	Total/NA	Solid	3541	
500-221200-3 MS	Yellow NW Basement Hall	Total/NA	Solid	3541	
500-221200-3 MSD	Yellow NW Basement Hall	Total/NA	Solid	3541	

Analysis Batch: 672934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221200-1	Beige-North Foyer	Total/NA	Solid	8082A	672813
MB 500-672813/20-A	Method Blank	Total/NA	Solid	8082A	672813
LCS 500-672813/21-A	Lab Control Sample	Total/NA	Solid	8082A	672813

Analysis Batch: 673094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221200-2	Brown-SW Door Frame	Total/NA	Solid	8082A	672813
500-221200-3	Yellow NW Basement Hall	Total/NA	Solid	8082A	672813
500-221200-4	White-West Basement Room	Total/NA	Solid	8082A	672813
500-221200-5	Grey-North Basement Room	Total/NA	Solid	8082A	672813
500-221200-6	Blue-SE Basement RR	Total/NA	Solid	8082A	672813
500-221200-7	Green-NE Classr. 1st FI	Total/NA	Solid	8082A	672813
500-221200-8	Red 3rd FI Cloak Rm	Total/NA	Solid	8082A	672813
500-221200-9	Black-NW Stairs Handr.	Total/NA	Solid	8082A	672813
500-221200-3 MS	Yellow NW Basement Hall	Total/NA	Solid	8082A	672813
500-221200-3 MSD	Yellow NW Basement Hall	Total/NA	Solid	8082A	672813

Metals

Leach Batch: 672837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221200-10	Comp Paint Sample	TCLP	Solid	1311	
LB 500-672837/1-B	Method Blank	TCLP	Solid	1311	
LB 500-672837/2-B	Method Blank	TCLP	Solid	1311	

Prep Batch: 673056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221200-10	Comp Paint Sample	TCLP	Solid	3010A	672837
LB 500-672837/1-B	Method Blank	TCLP	Solid	3010A	672837
LCS 500-673056/2-A	Lab Control Sample	Total/NA	Solid	3010A	

Prep Batch: 673234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221200-10	Comp Paint Sample	TCLP	Solid	7470A	672837
LB 500-672837/2-B	Method Blank	TCLP	Solid	7470A	672837

Eurofins Chicago

QC Association Summary

Client: Wood E&I Solutions Inc
 Project/Site: Harrison School

Job ID: 500-221200-1

Metals (Continued)

Prep Batch: 673234 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-673234/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-673234/14-A	Lab Control Sample	Total/NA	Solid	7470A	

Analysis Batch: 673405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221200-10	Comp Paint Sample	TCLP	Solid	6010C	673056
LB 500-672837/1-B	Method Blank	TCLP	Solid	6010C	673056
LCS 500-673056/2-A	Lab Control Sample	Total/NA	Solid	6010C	673056

Analysis Batch: 673473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221200-10	Comp Paint Sample	TCLP	Solid	7470A	673234
LB 500-672837/2-B	Method Blank	TCLP	Solid	7470A	673234
MB 500-673234/12-A	Method Blank	Total/NA	Solid	7470A	673234
LCS 500-673234/14-A	Lab Control Sample	Total/NA	Solid	7470A	673234



Surrogate Summary

Client: Wood E&I Solutions Inc
Project/Site: Harrison School

Job ID: 500-221200-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		TCX1 (49-129)	DCBP1 (37-121)
500-221200-1	Beige-North Foyer	108	98
500-221200-2	Brown-SW Door Frame	0 D	0 D
500-221200-3	Yellow NW Basement Hall	104	114
500-221200-3 MS	Yellow NW Basement Hall	111	123 S1+
500-221200-3 MSD	Yellow NW Basement Hall	102	116
500-221200-4	White-West Basement Room	104	100
500-221200-5	Grey-North Basement Room	125	173 S1+
500-221200-6	Blue-SE Basement RR	123	159 S1+
500-221200-7	Green-NE Classr. 1st Fl	96	810 S1+
500-221200-8	Red 3rd Fl Cloak Rm	118	135 S1+
500-221200-9	Black-NW Stairs Handr.	121	156 S1+
LCS 500-672813/21-A	Lab Control Sample	98	118
MB 500-672813/20-A	Method Blank	80	117

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

QC Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Harrison School

Job ID: 500-221200-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 500-672813/20-A
Matrix: Solid
Analysis Batch: 672934

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 672813

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.25		0.25	0.098	ug/Kg		09/01/22 14:19	09/02/22 11:57	1
PCB-1221	<0.25		0.25	0.098	ug/Kg		09/01/22 14:19	09/02/22 11:57	1
PCB-1232	<0.25		0.25	0.068	ug/Kg		09/01/22 14:19	09/02/22 11:57	1
PCB-1242	<0.25		0.25	0.097	ug/Kg		09/01/22 14:19	09/02/22 11:57	1
PCB-1248	<0.25		0.25	0.12	ug/Kg		09/01/22 14:19	09/02/22 11:57	1
PCB-1254	<0.25		0.25	0.085	ug/Kg		09/01/22 14:19	09/02/22 11:57	1
PCB-1260	<0.25		0.25	0.094	ug/Kg		09/01/22 14:19	09/02/22 11:57	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	80		49 - 129	09/01/22 14:19	09/02/22 11:57	1
DCB Decachlorobiphenyl	117		37 - 121	09/01/22 14:19	09/02/22 11:57	1

Lab Sample ID: LCS 500-672813/21-A
Matrix: Solid
Analysis Batch: 672934

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 672813

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
PCB-1016	2.50	2.31		ug/Kg		92	57 - 120
PCB-1260	2.50	2.49		ug/Kg		100	61 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	98		49 - 129
DCB Decachlorobiphenyl	118		37 - 121

Lab Sample ID: 500-221200-3 MS
Matrix: Solid
Analysis Batch: 673094

Client Sample ID: Yellow NW Basement Hall
Prep Type: Total/NA
Prep Batch: 672813

Analyte	Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
PCB-1016	<2100	F1	2240	3980	F1	ug/Kg		178	57 - 120
PCB-1260	<2100	F1	2240	14200	F1	ug/Kg		634	61 - 125

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	111		49 - 129
DCB Decachlorobiphenyl	123	S1+	37 - 121

Lab Sample ID: 500-221200-3 MSD
Matrix: Solid
Analysis Batch: 673094

Client Sample ID: Yellow NW Basement Hall
Prep Type: Total/NA
Prep Batch: 672813

Analyte	Sample		Spike Added	MSD MSD		Unit	D	%Rec	%Rec Limits	RPD	
	Result	Qualifier		Result	Qualifier					RPD	Limit
PCB-1016	<2100	F1	1950	3040	F1	ug/Kg		156	57 - 120	27	30
PCB-1260	<2100	F1	1950	12400	F1	ug/Kg		636	61 - 125	14	30

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	102		49 - 129
DCB Decachlorobiphenyl	116		37 - 121

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QC Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Harrison School

Job ID: 500-221200-1

Method: 6010C - Metals (ICP)

Lab Sample ID: LCS 500-673056/2-A
Matrix: Solid
Analysis Batch: 673405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 673056

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.100	0.109		mg/L		109	80 - 120
Barium	0.500	0.510		mg/L		102	80 - 120
Cadmium	0.0500	0.0520		mg/L		104	80 - 120
Chromium	0.200	0.196		mg/L		98	80 - 120
Lead	0.100	0.0938		mg/L		94	80 - 120
Selenium	0.100	0.114		mg/L		114	80 - 120
Silver	0.0500	0.0538		mg/L		108	80 - 120

Lab Sample ID: LB 500-672837/1-B
Matrix: Solid
Analysis Batch: 673405

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 673056

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		09/02/22 16:59	09/06/22 19:52	1
Barium	<0.50		0.50	0.050	mg/L		09/02/22 16:59	09/06/22 19:52	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/02/22 16:59	09/06/22 19:52	1
Chromium	<0.025		0.025	0.010	mg/L		09/02/22 16:59	09/06/22 19:52	1
Lead	<0.050		0.050	0.0075	mg/L		09/02/22 16:59	09/06/22 19:52	1
Selenium	<0.050		0.050	0.020	mg/L		09/02/22 16:59	09/06/22 19:52	1
Silver	<0.025		0.025	0.010	mg/L		09/02/22 16:59	09/06/22 19:52	1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-673234/12-A
Matrix: Solid
Analysis Batch: 673473

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 673234

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.20	0.20	ug/L		09/06/22 11:15	09/07/22 10:01	1

Lab Sample ID: LCS 500-673234/14-A
Matrix: Solid
Analysis Batch: 673473

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 673234

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	2.00	2.15		ug/L		108	80 - 120

Lab Sample ID: LB 500-672837/2-B
Matrix: Solid
Analysis Batch: 673473

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 673234

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.20	0.20	ug/L		09/06/22 11:15	09/07/22 10:03	1

Lab Chronicle

Client: Wood E&I Solutions Inc
Project/Site: Harrison School

Job ID: 500-221200-1

Client Sample ID: Beige-North Foyer

Lab Sample ID: 500-221200-1

Date Collected: 08/22/22 07:25

Matrix: Solid

Date Received: 08/23/22 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672813	EK	EET CHI	09/01/22 14:19 - 09/01/22 20:00 ¹
Total/NA	Analysis	8082A		1	672934	SB	EET CHI	09/02/22 13:56

Client Sample ID: Brown-SW Door Frame

Lab Sample ID: 500-221200-2

Date Collected: 08/22/22 09:10

Matrix: Solid

Date Received: 08/23/22 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672813	EK	EET CHI	09/01/22 14:19 - 09/01/22 20:00 ¹
Total/NA	Analysis	8082A		40	673094	NB	EET CHI	09/04/22 12:00

Client Sample ID: Yellow NW Basement Hall

Lab Sample ID: 500-221200-3

Date Collected: 08/22/22 09:48

Matrix: Solid

Date Received: 08/23/22 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672813	EK	EET CHI	09/01/22 14:19 - 09/01/22 20:00 ¹
Total/NA	Analysis	8082A		10	673094	NB	EET CHI	09/04/22 09:47

Client Sample ID: White-West Basement Room

Lab Sample ID: 500-221200-4

Date Collected: 08/22/22 10:02

Matrix: Solid

Date Received: 08/23/22 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672813	EK	EET CHI	09/01/22 14:19 - 09/01/22 20:00 ¹
Total/NA	Analysis	8082A		2	673094	NB	EET CHI	09/04/22 10:31

Client Sample ID: Grey-North Basement Room

Lab Sample ID: 500-221200-5

Date Collected: 08/22/22 10:20

Matrix: Solid

Date Received: 08/23/22 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672813	EK	EET CHI	09/01/22 14:19 - 09/01/22 20:00 ¹
Total/NA	Analysis	8082A		10	673094	NB	EET CHI	09/04/22 10:46

Client Sample ID: Blue-SE Basement RR

Lab Sample ID: 500-221200-6

Date Collected: 08/22/22 10:43

Matrix: Solid

Date Received: 08/23/22 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672813	EK	EET CHI	09/01/22 14:19 - 09/01/22 20:00 ¹
Total/NA	Analysis	8082A		10	673094	NB	EET CHI	09/04/22 12:15

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Lab Chronicle

Client: Wood E&I Solutions Inc
 Project/Site: Harrison School

Job ID: 500-221200-1

Client Sample ID: Green-NE Classr. 1st FI

Lab Sample ID: 500-221200-7

Date Collected: 08/22/22 11:35

Matrix: Solid

Date Received: 08/23/22 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672813	EK	EET CHI	09/01/22 14:19 - 09/01/22 20:00 ¹
Total/NA	Analysis	8082A		2	673094	NB	EET CHI	09/04/22 12:30

Client Sample ID: Red 3rd FI Cloak Rm

Lab Sample ID: 500-221200-8

Date Collected: 08/22/22 13:15

Matrix: Solid

Date Received: 08/23/22 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672813	EK	EET CHI	09/01/22 14:19 - 09/01/22 20:00 ¹
Total/NA	Analysis	8082A		5	673094	NB	EET CHI	09/04/22 12:45

Client Sample ID: Black-NW Stairs Handr.

Lab Sample ID: 500-221200-9

Date Collected: 08/22/22 14:15

Matrix: Solid

Date Received: 08/23/22 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672813	EK	EET CHI	09/01/22 14:19 - 09/01/22 20:00 ¹
Total/NA	Analysis	8082A		10	673094	NB	EET CHI	09/04/22 12:59

Client Sample ID: Comp Paint Sample

Lab Sample ID: 500-221200-10

Date Collected: 08/22/22 17:40

Matrix: Solid

Date Received: 08/23/22 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
TCLP	Leach	1311			672837	EA	EET CHI	09/01/22 14:30 - 09/02/22 08:30 ¹
TCLP	Prep	3010A			673056	LMB	EET CHI	09/02/22 16:59 - 09/02/22 17:29 ¹
TCLP	Analysis	6010C		1	673405	JJB	EET CHI	09/06/22 22:09
TCLP	Leach	1311			672837	EA	EET CHI	09/01/22 14:30 - 09/02/22 08:30 ¹
TCLP	Prep	7470A			673234	MJG	EET CHI	09/06/22 11:15 - 09/06/22 13:15 ¹
TCLP	Analysis	7470A		1	673473	MJG	EET CHI	09/07/22 10:54

¹ Completion dates and times are reported or not reported per method requirements or individual lab discretion.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Wood E&I Solutions Inc
Project/Site: Harrison School

Job ID: 500-221200-1

Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

1

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Chain of Custody Record

538777




Environment Testing
TestAmerica

Address _____

Regulatory Program: DW NPDES RCRA Other

TAL-8210

Client Contact		Project Manager Hoffman		Site Contact mcwally		Date: 8-22-22		COC No	
Company Name WOOD		Tel/Email		Lab Contact W2164+		Carrier:		_____ of _____ COCs	
Address 2412 NEDRADKA		Analysis Turnaround Time		Filtered Sample (Y/N) Perform MS / MSD (Y/N) PCB ICLP RERA METALS		 500-221200 COC		Sampler	
City/State/Zip		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS						For Lab Use Only	
Phone		TAT if different from Below _____						Walk-in Client	
Fax		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day						Lab Sampling	
Project Name HARRISON SCHOOL								Job / SDG No	
Site CITY OF PEORIA								500-221200	
P O #									
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sample Specific Notes		
1 Beige - North foyer		8/22/22	0725	G	PAINT	1			
2 BROWN - SW DOOR FRAME			0910	G					
3 Yellow NW basement HALL			0948	G					
4 White - West basement room			1002	G					
5 Grey - North basement room			1020	G					
6 BLUE - SE basement RR			1043	G					
7 GREEN - NE CLASSR. 1st FL			1135	G					
8 RED 3rd FL CLOAK RM			1315	G					
9 BLACK - NW STAIRS HANDR.			1415	G					
10 Comp PAINT SAMPLE		8/22/22	1740	C	Paint	1			
Preservation Used 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other _____									
Possible Hazard Identification Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
<input type="checkbox"/> Non Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown					<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months				
Special Instructions/QC Requirements & Comments:									
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temp (°C) Obs'd 5.8 Corr'd 3.8		Therm ID No _____			
Relinquished by [Signature]		Company WOOD		Date/Time 8/24/22 1845		Received by		Company	
Relinquished by		Company		Date/Time		Received by		Company	
Relinquished by		Company		Date/Time		Received in Laboratory by [Signature]		Company PEORIA	
								Date/Time 8/23/22 1025	

Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 500-221200-1

Login Number: 221200

List Number: 1

Creator: Scott, Sherri L

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-221198-1
Client Project/Site: McKinley School

For:
Wood E&I Solutions Inc
8745 West Higgins Road
Suite 300
Chicago, Illinois 60631

Attn: Ms. Mary E. Jank



Authorized for release by:
9/7/2022 3:58:29 PM

Richard Wright, Senior Project Manager
(708)746-0045

Richard.Wright@et.eurofinsus.com

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results through



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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

481
Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Wood E&I Solutions Inc
Project/Site: McKinley School

Job ID: 500-221198-1

Job ID: 500-221198-1

Laboratory: Eurofins Chicago

Narrative

Job Narrative 500-221198-1

Receipt

The samples were received on 8/23/2022 10:25 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.8° C.

GC Semi VOA

Method 8082A: Surrogate Tetrachloro-m-xylene recovery for the following Continuing Calibration Verification (CCVIS) was outside control limits: (CCVIS 500-672790/3). The other surrogate was within limits; therefore, re-analysis was not performed.

Method 8082A: The following samples required a dilution due to the nature of the sample matrix: White Kitchen Duct (500-221198-2), Yellow Foyer Hall (500-221198-3), Beige Foyer Hall (500-221198-4), Red Lower Wall (500-221198-7), Pink Upper Wall (500-221198-8), Lt Blue Upper Wall (500-221198-9), Dk Blue Lower Wall (500-221198-10), Grey-Foyer (500-221198-11) and White-Foyer (500-221198-12). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method 8082A: The continuing calibration verification (CCVIS) was outside of the control limits for Tetrachloro-m-xylene for analytical batch 500-672934. The CCVIS recoveries of the target analytes and the other surrogate DCB Decachlorobiphenyl were within the control limits; therefore the data has been reported. (CCVIS 500-672934/3)

Method 8082A: The %RPD between the primary and confirmation column exceeded 40% for PCB-1254 for the following sample: Brown-Basement Hall (500-221198-15). The lower values has been reported and qualified in accordance with the laboratory's SOP.

Method 8082A: The following samples required a dilution due to the nature of the sample matrix: Dark Green L-Wall (500-221198-5), Green Upper Wall (500-221198-6), Light Purple U-Wall (500-221198-13), Dark Purple L-Wall (500-221198-14) and Brown-Basement Hall (500-221198-15). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: McKinley School

Job ID: 500-221198-1

Client Sample ID: Lt Green SE Room

Lab Sample ID: 500-221198-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	9000		2200	750	ug/Kg	10		8082A	Total/NA

Client Sample ID: White Kitchen Duct

Lab Sample ID: 500-221198-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	43000		9800	3300	ug/Kg	50		8082A	Total/NA

Client Sample ID: Yellow Foyer Hall

Lab Sample ID: 500-221198-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	20000		6700	2300	ug/Kg	50		8082A	Total/NA

Client Sample ID: Beige Foyer Hall

Lab Sample ID: 500-221198-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	27000		9300	3100	ug/Kg	50		8082A	Total/NA

Client Sample ID: Dark Green L-Wall

Lab Sample ID: 500-221198-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	96000		21000	7000	ug/Kg	100		8082A	Total/NA

Client Sample ID: Green Upper Wall

Lab Sample ID: 500-221198-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	67000		18000	6200	ug/Kg	100		8082A	Total/NA

Client Sample ID: Red Lower Wall

Lab Sample ID: 500-221198-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	40000		4900	1700	ug/Kg	20		8082A	Total/NA

Client Sample ID: Pink Upper Wall

Lab Sample ID: 500-221198-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	24000		4200	1400	ug/Kg	20		8082A	Total/NA

Client Sample ID: Lt Blue Upper Wall

Lab Sample ID: 500-221198-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	9800		3600	1200	ug/Kg	20		8082A	Total/NA

Client Sample ID: Dk Blue Lower Wall

Lab Sample ID: 500-221198-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	9200		3700	1200	ug/Kg	20		8082A	Total/NA

Client Sample ID: Grey-Foyer

Lab Sample ID: 500-221198-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	39000		4400	1500	ug/Kg	20		8082A	Total/NA

Client Sample ID: White-Foyer

Lab Sample ID: 500-221198-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	11000		2600	870	ug/Kg	20		8082A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: McKinley School

Job ID: 500-221198-1

Client Sample ID: Light Purple U-Wall

Lab Sample ID: 500-221198-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	110000		14000	4600	ug/Kg	100		8082A	Total/NA

Client Sample ID: Dark Purple L-Wall

Lab Sample ID: 500-221198-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	110000		20000	6900	ug/Kg	100		8082A	Total/NA

Client Sample ID: Brown-Basement Hall

Lab Sample ID: 500-221198-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	72000		32000	11000	ug/Kg	200		8082A	Total/NA

Client Sample ID: McKinley Ceramic Comp

Lab Sample ID: 500-221198-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.12	J	0.50	0.050	mg/L	1		6010C	TCLP

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

Method Summary

Client: Wood E&I Solutions Inc
Project/Site: McKinley School

Job ID: 500-221198-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CHI
6010C	Metals (ICP)	SW846	EET CHI
7470A	Mercury (CVAA)	SW846	EET CHI
1311	TCLP Extraction	SW846	EET CHI
3010A	Preparation, Total Metals	SW846	EET CHI
3541	Automated Soxhlet Extraction	SW846	EET CHI
7470A	Preparation, Mercury	SW846	EET CHI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



Sample Summary

Client: Wood E&I Solutions Inc
Project/Site: McKinley School

Job ID: 500-221198-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-221198-1	Lt Green SE Room	Solid	08/22/22 14:50	08/23/22 10:25
500-221198-2	White Kitchen Duct	Solid	08/22/22 15:00	08/23/22 10:25
500-221198-3	Yellow Foyer Hall	Solid	08/22/22 15:15	08/23/22 10:25
500-221198-4	Beige Foyer Hall	Solid	08/22/22 15:25	08/23/22 10:25
500-221198-5	Dark Green L-Wall	Solid	08/22/22 15:35	08/23/22 10:25
500-221198-6	Green Upper Wall	Solid	08/22/22 15:45	08/23/22 10:25
500-221198-7	Red Lower Wall	Solid	08/22/22 15:55	08/23/22 10:25
500-221198-8	Pink Upper Wall	Solid	08/22/22 16:00	08/23/22 10:25
500-221198-9	Lt Blue Upper Wall	Solid	08/22/22 16:15	08/23/22 10:25
500-221198-10	Dk Blue Lower Wall	Solid	08/22/22 16:20	08/23/22 10:25
500-221198-11	Grey-Foyer	Solid	08/22/22 16:40	08/23/22 10:25
500-221198-12	White-Foyer	Solid	08/22/22 16:45	08/23/22 10:25
500-221198-13	Light Purple U-Wall	Solid	08/22/22 16:55	08/23/22 10:25
500-221198-14	Dark Purple L-Wall	Solid	08/22/22 17:05	08/23/22 10:25
500-221198-15	Brown-Basement Hall	Solid	08/22/22 17:30	08/23/22 10:25
500-221198-16	McKinley Ceramic Comp	Solid	08/22/22 18:10	08/23/22 10:25



Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: McKinley School

Job ID: 500-221198-1

Client Sample ID: Lt Green SE Room

Lab Sample ID: 500-221198-1

Date Collected: 08/22/22 14:50

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<2200		2200	870	ug/Kg		08/31/22 13:39	09/01/22 18:04	10
PCB-1221	<2200		2200	870	ug/Kg		08/31/22 13:39	09/01/22 18:04	10
PCB-1232	<2200		2200	600	ug/Kg		08/31/22 13:39	09/01/22 18:04	10
PCB-1242	<2200		2200	860	ug/Kg		08/31/22 13:39	09/01/22 18:04	10
PCB-1248	<2200		2200	1100	ug/Kg		08/31/22 13:39	09/01/22 18:04	10
PCB-1254	9000		2200	750	ug/Kg		08/31/22 13:39	09/01/22 18:04	10
PCB-1260	<2200		2200	830	ug/Kg		08/31/22 13:39	09/01/22 18:04	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	114		49 - 129	08/31/22 13:39	09/01/22 18:04	10
<i>DCB Decachlorobiphenyl</i>	120		37 - 121	08/31/22 13:39	09/01/22 18:04	10

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: McKinley School

Job ID: 500-221198-1

Client Sample ID: White Kitchen Duct

Lab Sample ID: 500-221198-2

Date Collected: 08/22/22 15:00

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<9800		9800	3800	ug/Kg		08/31/22 13:39	09/01/22 18:19	50
PCB-1221	<9800		9800	3800	ug/Kg		08/31/22 13:39	09/01/22 18:19	50
PCB-1232	<9800		9800	2700	ug/Kg		08/31/22 13:39	09/01/22 18:19	50
PCB-1242	<9800		9800	3800	ug/Kg		08/31/22 13:39	09/01/22 18:19	50
PCB-1248	<9800		9800	4700	ug/Kg		08/31/22 13:39	09/01/22 18:19	50
PCB-1254	43000		9800	3300	ug/Kg		08/31/22 13:39	09/01/22 18:19	50
PCB-1260	<9800		9800	3700	ug/Kg		08/31/22 13:39	09/01/22 18:19	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	D	49 - 129	08/31/22 13:39	09/01/22 18:19	50
DCB Decachlorobiphenyl	0	D	37 - 121	08/31/22 13:39	09/01/22 18:19	50

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: McKinley School

Job ID: 500-221198-1

Client Sample ID: Yellow Foyer Hall

Lab Sample ID: 500-221198-3

Date Collected: 08/22/22 15:15

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<6700		6700	2600	ug/Kg		08/31/22 13:39	09/01/22 18:33	50
PCB-1221	<6700		6700	2600	ug/Kg		08/31/22 13:39	09/01/22 18:33	50
PCB-1232	<6700		6700	1800	ug/Kg		08/31/22 13:39	09/01/22 18:33	50
PCB-1242	<6700		6700	2600	ug/Kg		08/31/22 13:39	09/01/22 18:33	50
PCB-1248	<6700		6700	3200	ug/Kg		08/31/22 13:39	09/01/22 18:33	50
PCB-1254	20000		6700	2300	ug/Kg		08/31/22 13:39	09/01/22 18:33	50
PCB-1260	<6700		6700	2500	ug/Kg		08/31/22 13:39	09/01/22 18:33	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	D	49 - 129	08/31/22 13:39	09/01/22 18:33	50
DCB Decachlorobiphenyl	0	D	37 - 121	08/31/22 13:39	09/01/22 18:33	50

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: McKinley School

Job ID: 500-221198-1

Client Sample ID: Beige Foyer Hall

Lab Sample ID: 500-221198-4

Date Collected: 08/22/22 15:25

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<9300		9300	3600	ug/Kg		08/31/22 13:39	09/01/22 18:48	50
PCB-1221	<9300		9300	3600	ug/Kg		08/31/22 13:39	09/01/22 18:48	50
PCB-1232	<9300		9300	2500	ug/Kg		08/31/22 13:39	09/01/22 18:48	50
PCB-1242	<9300		9300	3600	ug/Kg		08/31/22 13:39	09/01/22 18:48	50
PCB-1248	<9300		9300	4400	ug/Kg		08/31/22 13:39	09/01/22 18:48	50
PCB-1254	27000		9300	3100	ug/Kg		08/31/22 13:39	09/01/22 18:48	50
PCB-1260	<9300		9300	3500	ug/Kg		08/31/22 13:39	09/01/22 18:48	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	D	49 - 129	08/31/22 13:39	09/01/22 18:48	50
DCB Decachlorobiphenyl	0	D	37 - 121	08/31/22 13:39	09/01/22 18:48	50

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: McKinley School

Job ID: 500-221198-1

Client Sample ID: Dark Green L-Wall

Lab Sample ID: 500-221198-5

Date Collected: 08/22/22 15:35

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<21000		21000	8100	ug/Kg		08/31/22 13:39	09/02/22 10:43	100
PCB-1221	<21000		21000	8100	ug/Kg		08/31/22 13:39	09/02/22 10:43	100
PCB-1232	<21000		21000	5600	ug/Kg		08/31/22 13:39	09/02/22 10:43	100
PCB-1242	<21000		21000	8000	ug/Kg		08/31/22 13:39	09/02/22 10:43	100
PCB-1248	<21000		21000	9800	ug/Kg		08/31/22 13:39	09/02/22 10:43	100
PCB-1254	96000		21000	7000	ug/Kg		08/31/22 13:39	09/02/22 10:43	100
PCB-1260	<21000		21000	7700	ug/Kg		08/31/22 13:39	09/02/22 10:43	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	D	49 - 129	08/31/22 13:39	09/02/22 10:43	100
DCB Decachlorobiphenyl	0	D	37 - 121	08/31/22 13:39	09/02/22 10:43	100

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: McKinley School

Job ID: 500-221198-1

Client Sample ID: Green Upper Wall

Lab Sample ID: 500-221198-6

Date Collected: 08/22/22 15:45

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<18000		18000	7200	ug/Kg		08/31/22 13:39	09/02/22 10:58	100
PCB-1221	<18000		18000	7200	ug/Kg		08/31/22 13:39	09/02/22 10:58	100
PCB-1232	<18000		18000	4900	ug/Kg		08/31/22 13:39	09/02/22 10:58	100
PCB-1242	<18000		18000	7100	ug/Kg		08/31/22 13:39	09/02/22 10:58	100
PCB-1248	<18000		18000	8700	ug/Kg		08/31/22 13:39	09/02/22 10:58	100
PCB-1254	67000		18000	6200	ug/Kg		08/31/22 13:39	09/02/22 10:58	100
PCB-1260	<18000		18000	6900	ug/Kg		08/31/22 13:39	09/02/22 10:58	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	D	49 - 129	08/31/22 13:39	09/02/22 10:58	100
DCB Decachlorobiphenyl	0	D	37 - 121	08/31/22 13:39	09/02/22 10:58	100

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: McKinley School

Job ID: 500-221198-1

Client Sample ID: Red Lower Wall

Lab Sample ID: 500-221198-7

Date Collected: 08/22/22 15:55

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<4900		4900	1900	ug/Kg		08/31/22 13:39	09/01/22 19:33	20
PCB-1221	<4900		4900	1900	ug/Kg		08/31/22 13:39	09/01/22 19:33	20
PCB-1232	<4900		4900	1300	ug/Kg		08/31/22 13:39	09/01/22 19:33	20
PCB-1242	<4900		4900	1900	ug/Kg		08/31/22 13:39	09/01/22 19:33	20
PCB-1248	<4900		4900	2300	ug/Kg		08/31/22 13:39	09/01/22 19:33	20
PCB-1254	40000		4900	1700	ug/Kg		08/31/22 13:39	09/01/22 19:33	20
PCB-1260	<4900		4900	1800	ug/Kg		08/31/22 13:39	09/01/22 19:33	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	0	D	49 - 129	08/31/22 13:39	09/01/22 19:33	20
<i>DCB Decachlorobiphenyl</i>	0	D	37 - 121	08/31/22 13:39	09/01/22 19:33	20

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: McKinley School

Job ID: 500-221198-1

Client Sample ID: Pink Upper Wall

Lab Sample ID: 500-221198-8

Date Collected: 08/22/22 16:00

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<4200		4200	1600	ug/Kg		08/31/22 13:39	09/01/22 19:48	20
PCB-1221	<4200		4200	1600	ug/Kg		08/31/22 13:39	09/01/22 19:48	20
PCB-1232	<4200		4200	1100	ug/Kg		08/31/22 13:39	09/01/22 19:48	20
PCB-1242	<4200		4200	1600	ug/Kg		08/31/22 13:39	09/01/22 19:48	20
PCB-1248	<4200		4200	2000	ug/Kg		08/31/22 13:39	09/01/22 19:48	20
PCB-1254	24000		4200	1400	ug/Kg		08/31/22 13:39	09/01/22 19:48	20
PCB-1260	<4200		4200	1600	ug/Kg		08/31/22 13:39	09/01/22 19:48	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	D	49 - 129	08/31/22 13:39	09/01/22 19:48	20
DCB Decachlorobiphenyl	0	D	37 - 121	08/31/22 13:39	09/01/22 19:48	20

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: McKinley School

Job ID: 500-221198-1

Client Sample ID: Lt Blue Upper Wall

Lab Sample ID: 500-221198-9

Date Collected: 08/22/22 16:15

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<3600		3600	1400	ug/Kg		08/31/22 13:39	09/01/22 20:02	20
PCB-1221	<3600		3600	1400	ug/Kg		08/31/22 13:39	09/01/22 20:02	20
PCB-1232	<3600		3600	960	ug/Kg		08/31/22 13:39	09/01/22 20:02	20
PCB-1242	<3600		3600	1400	ug/Kg		08/31/22 13:39	09/01/22 20:02	20
PCB-1248	<3600		3600	1700	ug/Kg		08/31/22 13:39	09/01/22 20:02	20
PCB-1254	9800		3600	1200	ug/Kg		08/31/22 13:39	09/01/22 20:02	20
PCB-1260	<3600		3600	1300	ug/Kg		08/31/22 13:39	09/01/22 20:02	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	D	49 - 129	08/31/22 13:39	09/01/22 20:02	20
DCB Decachlorobiphenyl	0	D	37 - 121	08/31/22 13:39	09/01/22 20:02	20

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: McKinley School

Job ID: 500-221198-1

Client Sample ID: Dk Blue Lower Wall

Lab Sample ID: 500-221198-10

Date Collected: 08/22/22 16:20

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<3700		3700	1400	ug/Kg		08/31/22 13:39	09/01/22 15:50	20
PCB-1221	<3700		3700	1400	ug/Kg		08/31/22 13:39	09/01/22 15:50	20
PCB-1232	<3700		3700	1000	ug/Kg		08/31/22 13:39	09/01/22 15:50	20
PCB-1242	<3700		3700	1400	ug/Kg		08/31/22 13:39	09/01/22 15:50	20
PCB-1248	<3700		3700	1700	ug/Kg		08/31/22 13:39	09/01/22 15:50	20
PCB-1254	9200		3700	1200	ug/Kg		08/31/22 13:39	09/01/22 15:50	20
PCB-1260	<3700		3700	1400	ug/Kg		08/31/22 13:39	09/01/22 15:50	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	D	49 - 129	08/31/22 13:39	09/01/22 15:50	20
DCB Decachlorobiphenyl	0	D	37 - 121	08/31/22 13:39	09/01/22 15:50	20

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: McKinley School

Job ID: 500-221198-1

Client Sample ID: Grey-Foyer

Lab Sample ID: 500-221198-11

Date Collected: 08/22/22 16:40

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<4400		4400	1700	ug/Kg		08/31/22 13:39	09/01/22 16:05	20
PCB-1221	<4400		4400	1700	ug/Kg		08/31/22 13:39	09/01/22 16:05	20
PCB-1232	<4400		4400	1200	ug/Kg		08/31/22 13:39	09/01/22 16:05	20
PCB-1242	<4400		4400	1700	ug/Kg		08/31/22 13:39	09/01/22 16:05	20
PCB-1248	<4400		4400	2100	ug/Kg		08/31/22 13:39	09/01/22 16:05	20
PCB-1254	39000		4400	1500	ug/Kg		08/31/22 13:39	09/01/22 16:05	20
PCB-1260	<4400		4400	1700	ug/Kg		08/31/22 13:39	09/01/22 16:05	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	0	D	49 - 129	08/31/22 13:39	09/01/22 16:05	20
<i>DCB Decachlorobiphenyl</i>	0	D	37 - 121	08/31/22 13:39	09/01/22 16:05	20

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: McKinley School

Job ID: 500-221198-1

Client Sample ID: White-Foyer

Lab Sample ID: 500-221198-12

Date Collected: 08/22/22 16:45

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<2600		2600	1000	ug/Kg		08/31/22 13:39	09/01/22 16:20	20
PCB-1221	<2600		2600	1000	ug/Kg		08/31/22 13:39	09/01/22 16:20	20
PCB-1232	<2600		2600	700	ug/Kg		08/31/22 13:39	09/01/22 16:20	20
PCB-1242	<2600		2600	1000	ug/Kg		08/31/22 13:39	09/01/22 16:20	20
PCB-1248	<2600		2600	1200	ug/Kg		08/31/22 13:39	09/01/22 16:20	20
PCB-1254	11000		2600	870	ug/Kg		08/31/22 13:39	09/01/22 16:20	20
PCB-1260	<2600		2600	970	ug/Kg		08/31/22 13:39	09/01/22 16:20	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	D	49 - 129	08/31/22 13:39	09/01/22 16:20	20
DCB Decachlorobiphenyl	0	D	37 - 121	08/31/22 13:39	09/01/22 16:20	20

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: McKinley School

Job ID: 500-221198-1

Client Sample ID: Light Purple U-Wall

Lab Sample ID: 500-221198-13

Date Collected: 08/22/22 16:55

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<14000		14000	5300	ug/Kg		08/31/22 13:39	09/02/22 11:13	100
PCB-1221	<14000		14000	5300	ug/Kg		08/31/22 13:39	09/02/22 11:13	100
PCB-1232	<14000		14000	3700	ug/Kg		08/31/22 13:39	09/02/22 11:13	100
PCB-1242	<14000		14000	5300	ug/Kg		08/31/22 13:39	09/02/22 11:13	100
PCB-1248	<14000		14000	6500	ug/Kg		08/31/22 13:39	09/02/22 11:13	100
PCB-1254	110000		14000	4600	ug/Kg		08/31/22 13:39	09/02/22 11:13	100
PCB-1260	<14000		14000	5100	ug/Kg		08/31/22 13:39	09/02/22 11:13	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	D	49 - 129	08/31/22 13:39	09/02/22 11:13	100
DCB Decachlorobiphenyl	0	D	37 - 121	08/31/22 13:39	09/02/22 11:13	100

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: McKinley School

Job ID: 500-221198-1

Client Sample ID: Dark Purple L-Wall

Lab Sample ID: 500-221198-14

Date Collected: 08/22/22 17:05

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<20000		20000	8000	ug/Kg		08/31/22 13:39	09/02/22 11:27	100
PCB-1221	<20000		20000	8000	ug/Kg		08/31/22 13:39	09/02/22 11:27	100
PCB-1232	<20000		20000	5500	ug/Kg		08/31/22 13:39	09/02/22 11:27	100
PCB-1242	<20000		20000	7900	ug/Kg		08/31/22 13:39	09/02/22 11:27	100
PCB-1248	<20000		20000	9700	ug/Kg		08/31/22 13:39	09/02/22 11:27	100
PCB-1254	110000		20000	6900	ug/Kg		08/31/22 13:39	09/02/22 11:27	100
PCB-1260	<20000		20000	7700	ug/Kg		08/31/22 13:39	09/02/22 11:27	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	D	49 - 129	08/31/22 13:39	09/02/22 11:27	100
DCB Decachlorobiphenyl	0	D	37 - 121	08/31/22 13:39	09/02/22 11:27	100

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: McKinley School

Job ID: 500-221198-1

Client Sample ID: Brown-Basement Hall

Lab Sample ID: 500-221198-15

Date Collected: 08/22/22 17:30

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<32000		32000	13000	ug/Kg		08/31/22 13:39	09/02/22 11:42	200
PCB-1221	<32000		32000	13000	ug/Kg		08/31/22 13:39	09/02/22 11:42	200
PCB-1232	<32000		32000	8700	ug/Kg		08/31/22 13:39	09/02/22 11:42	200
PCB-1242	<32000		32000	13000	ug/Kg		08/31/22 13:39	09/02/22 11:42	200
PCB-1248	<32000		32000	15000	ug/Kg		08/31/22 13:39	09/02/22 11:42	200
PCB-1254	72000		32000	11000	ug/Kg		08/31/22 13:39	09/02/22 11:42	200
PCB-1260	<32000		32000	12000	ug/Kg		08/31/22 13:39	09/02/22 11:42	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	D	49 - 129	08/31/22 13:39	09/02/22 11:42	200
DCB Decachlorobiphenyl	0	D	37 - 121	08/31/22 13:39	09/02/22 11:42	200

Client Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: McKinley School

Job ID: 500-221198-1

Client Sample ID: McKinley Ceramic Comp

Lab Sample ID: 500-221198-16

Date Collected: 08/22/22 18:10

Matrix: Solid

Date Received: 08/23/22 10:25

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		09/02/22 16:59	09/06/22 22:05	1
Barium	0.12	J	0.50	0.050	mg/L		09/02/22 16:59	09/06/22 22:05	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/02/22 16:59	09/06/22 22:05	1
Chromium	<0.025		0.025	0.010	mg/L		09/02/22 16:59	09/06/22 22:05	1
Lead	<0.050		0.050	0.0075	mg/L		09/02/22 16:59	09/06/22 22:05	1
Selenium	<0.050		0.050	0.020	mg/L		09/02/22 16:59	09/06/22 22:05	1
Silver	<0.025		0.025	0.010	mg/L		09/02/22 16:59	09/06/22 22:05	1

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.20	0.20	ug/L		09/06/22 11:15	09/07/22 10:52	1

Definitions/Glossary

Client: Wood E&I Solutions Inc
Project/Site: McKinley School

Job ID: 500-221198-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: Wood E&I Solutions Inc
Project/Site: McKinley School

Job ID: 500-221198-1

GC Semi VOA

Prep Batch: 672590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221198-1	Lt Green SE Room	Total/NA	Solid	3541	
500-221198-2	White Kitchen Duct	Total/NA	Solid	3541	
500-221198-3	Yellow Foyer Hall	Total/NA	Solid	3541	
500-221198-4	Beige Foyer Hall	Total/NA	Solid	3541	
500-221198-5	Dark Green L-Wall	Total/NA	Solid	3541	
500-221198-6	Green Upper Wall	Total/NA	Solid	3541	
500-221198-7	Red Lower Wall	Total/NA	Solid	3541	
500-221198-8	Pink Upper Wall	Total/NA	Solid	3541	
500-221198-9	Lt Blue Upper Wall	Total/NA	Solid	3541	
500-221198-10	Dk Blue Lower Wall	Total/NA	Solid	3541	
500-221198-11	Grey-Foyer	Total/NA	Solid	3541	
500-221198-12	White-Foyer	Total/NA	Solid	3541	
500-221198-13	Light Purple U-Wall	Total/NA	Solid	3541	
500-221198-14	Dark Purple L-Wall	Total/NA	Solid	3541	
500-221198-15	Brown-Basement Hall	Total/NA	Solid	3541	
MB 500-672590/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-672590/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 672790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221198-1	Lt Green SE Room	Total/NA	Solid	8082A	672590
500-221198-2	White Kitchen Duct	Total/NA	Solid	8082A	672590
500-221198-3	Yellow Foyer Hall	Total/NA	Solid	8082A	672590
500-221198-4	Beige Foyer Hall	Total/NA	Solid	8082A	672590
500-221198-7	Red Lower Wall	Total/NA	Solid	8082A	672590
500-221198-8	Pink Upper Wall	Total/NA	Solid	8082A	672590
500-221198-9	Lt Blue Upper Wall	Total/NA	Solid	8082A	672590
500-221198-10	Dk Blue Lower Wall	Total/NA	Solid	8082A	672590
500-221198-11	Grey-Foyer	Total/NA	Solid	8082A	672590
500-221198-12	White-Foyer	Total/NA	Solid	8082A	672590
MB 500-672590/1-A	Method Blank	Total/NA	Solid	8082A	672590
LCS 500-672590/2-A	Lab Control Sample	Total/NA	Solid	8082A	672590

Analysis Batch: 672934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221198-5	Dark Green L-Wall	Total/NA	Solid	8082A	672590
500-221198-6	Green Upper Wall	Total/NA	Solid	8082A	672590
500-221198-13	Light Purple U-Wall	Total/NA	Solid	8082A	672590
500-221198-14	Dark Purple L-Wall	Total/NA	Solid	8082A	672590
500-221198-15	Brown-Basement Hall	Total/NA	Solid	8082A	672590

Metals

Leach Batch: 672837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221198-16	McKinley Ceramic Comp	TCLP	Solid	1311	
LB 500-672837/1-B	Method Blank	TCLP	Solid	1311	
LB 500-672837/2-B	Method Blank	TCLP	Solid	1311	

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QC Association Summary

Client: Wood E&I Solutions Inc
Project/Site: McKinley School

Job ID: 500-221198-1

Metals

Prep Batch: 673056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221198-16	McKinley Ceramic Comp	TCLP	Solid	3010A	672837
LB 500-672837/1-B	Method Blank	TCLP	Solid	3010A	672837
LCS 500-673056/2-A	Lab Control Sample	Total/NA	Solid	3010A	

Prep Batch: 673234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221198-16	McKinley Ceramic Comp	TCLP	Solid	7470A	672837
LB 500-672837/2-B	Method Blank	TCLP	Solid	7470A	672837
MB 500-673234/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-673234/14-A	Lab Control Sample	Total/NA	Solid	7470A	

Analysis Batch: 673405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221198-16	McKinley Ceramic Comp	TCLP	Solid	6010C	673056
LB 500-672837/1-B	Method Blank	TCLP	Solid	6010C	673056
LCS 500-673056/2-A	Lab Control Sample	Total/NA	Solid	6010C	673056

Analysis Batch: 673473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-221198-16	McKinley Ceramic Comp	TCLP	Solid	7470A	673234
LB 500-672837/2-B	Method Blank	TCLP	Solid	7470A	673234
MB 500-673234/12-A	Method Blank	Total/NA	Solid	7470A	673234
LCS 500-673234/14-A	Lab Control Sample	Total/NA	Solid	7470A	673234

Surrogate Summary

Client: Wood E&I Solutions Inc
 Project/Site: McKinley School

Job ID: 500-221198-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		TCX1 (49-129)	DCBP1 (37-121)
500-221198-1	Lt Green SE Room	114	120
500-221198-2	White Kitchen Duct	0 D	0 D
500-221198-3	Yellow Foyer Hall	0 D	0 D
500-221198-4	Beige Foyer Hall	0 D	0 D
500-221198-5	Dark Green L-Wall	0 D	0 D
500-221198-6	Green Upper Wall	0 D	0 D
500-221198-7	Red Lower Wall	0 D	0 D
500-221198-8	Pink Upper Wall	0 D	0 D
500-221198-9	Lt Blue Upper Wall	0 D	0 D
500-221198-10	Dk Blue Lower Wall	0 D	0 D
500-221198-11	Grey-Foyer	0 D	0 D
500-221198-12	White-Foyer	0 D	0 D
500-221198-13	Light Purple U-Wall	0 D	0 D
500-221198-14	Dark Purple L-Wall	0 D	0 D
500-221198-15	Brown-Basement Hall	0 D	0 D
LCS 500-672590/2-A	Lab Control Sample	111	102
MB 500-672590/1-A	Method Blank	98	114

Surrogate Legend

TCX = Tetrachloro-m-xylene
 DCBP = DCB Decachlorobiphenyl



QC Sample Results

Client: Wood E&I Solutions Inc
Project/Site: McKinley School

Job ID: 500-221198-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 500-672590/1-A
Matrix: Solid
Analysis Batch: 672790

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 672590

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<17		17	6.6	ug/Kg		08/31/22 13:39	09/01/22 12:52	1
PCB-1221	<17		17	6.6	ug/Kg		08/31/22 13:39	09/01/22 12:52	1
PCB-1232	<17		17	4.5	ug/Kg		08/31/22 13:39	09/01/22 12:52	1
PCB-1242	<17		17	6.5	ug/Kg		08/31/22 13:39	09/01/22 12:52	1
PCB-1248	<17		17	7.9	ug/Kg		08/31/22 13:39	09/01/22 12:52	1
PCB-1254	<17		17	5.7	ug/Kg		08/31/22 13:39	09/01/22 12:52	1
PCB-1260	<17		17	6.3	ug/Kg		08/31/22 13:39	09/01/22 12:52	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	98		49 - 129	08/31/22 13:39	09/01/22 12:52	1
DCB Decachlorobiphenyl	114		37 - 121	08/31/22 13:39	09/01/22 12:52	1

Lab Sample ID: LCS 500-672590/2-A
Matrix: Solid
Analysis Batch: 672790

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 672590

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
PCB-1016	167	162		ug/Kg		97	57 - 120
PCB-1260	167	153		ug/Kg		92	61 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	111		49 - 129
DCB Decachlorobiphenyl	102		37 - 121

Method: 6010C - Metals (ICP)

Lab Sample ID: LCS 500-673056/2-A
Matrix: Solid
Analysis Batch: 673405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 673056

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Arsenic	0.100	0.109		mg/L		109	80 - 120
Barium	0.500	0.510		mg/L		102	80 - 120
Cadmium	0.0500	0.0520		mg/L		104	80 - 120
Chromium	0.200	0.196		mg/L		98	80 - 120
Lead	0.100	0.0938		mg/L		94	80 - 120
Selenium	0.100	0.114		mg/L		114	80 - 120
Silver	0.0500	0.0538		mg/L		108	80 - 120

Lab Sample ID: LB 500-672837/1-B
Matrix: Solid
Analysis Batch: 673405

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 673056

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<0.050		0.050	0.010	mg/L		09/02/22 16:59	09/06/22 19:52	1
Barium	<0.50		0.50	0.050	mg/L		09/02/22 16:59	09/06/22 19:52	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		09/02/22 16:59	09/06/22 19:52	1
Chromium	<0.025		0.025	0.010	mg/L		09/02/22 16:59	09/06/22 19:52	1

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QC Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: McKinley School

Job ID: 500-221198-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LB 500-672837/1-B
Matrix: Solid
Analysis Batch: 673405

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 673056

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	<0.050		0.050	0.0075	mg/L		09/02/22 16:59	09/06/22 19:52	1
Selenium	<0.050		0.050	0.020	mg/L		09/02/22 16:59	09/06/22 19:52	1
Silver	<0.025		0.025	0.010	mg/L		09/02/22 16:59	09/06/22 19:52	1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-673234/12-A
Matrix: Solid
Analysis Batch: 673473

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 673234

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.20		0.20	0.20	ug/L		09/06/22 11:15	09/07/22 10:01	1

Lab Sample ID: LCS 500-673234/14-A
Matrix: Solid
Analysis Batch: 673473

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 673234

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

Lab Sample ID: LB 500-672837/2-B
Matrix: Solid
Analysis Batch: 673473

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 673234

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.20		0.20	0.20	ug/L		09/06/22 11:15	09/07/22 10:03	1

Lab Chronicle

Client: Wood E&I Solutions Inc
Project/Site: McKinley School

Job ID: 500-221198-1

Client Sample ID: Lt Green SE Room

Lab Sample ID: 500-221198-1

Date Collected: 08/22/22 14:50

Matrix: Solid

Date Received: 08/23/22 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672590	EK	EET CHI	08/31/22 13:39 - 08/31/22 17:30 ¹
Total/NA	Analysis	8082A		10	672790	SS	EET CHI	09/01/22 18:04

Client Sample ID: White Kitchen Duct

Lab Sample ID: 500-221198-2

Date Collected: 08/22/22 15:00

Matrix: Solid

Date Received: 08/23/22 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672590	EK	EET CHI	08/31/22 13:39 - 08/31/22 17:30 ¹
Total/NA	Analysis	8082A		50	672790	SS	EET CHI	09/01/22 18:19

Client Sample ID: Yellow Foyer Hall

Lab Sample ID: 500-221198-3

Date Collected: 08/22/22 15:15

Matrix: Solid

Date Received: 08/23/22 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672590	EK	EET CHI	08/31/22 13:39 - 08/31/22 17:30 ¹
Total/NA	Analysis	8082A		50	672790	SS	EET CHI	09/01/22 18:33

Client Sample ID: Beige Foyer Hall

Lab Sample ID: 500-221198-4

Date Collected: 08/22/22 15:25

Matrix: Solid

Date Received: 08/23/22 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672590	EK	EET CHI	08/31/22 13:39 - 08/31/22 17:30 ¹
Total/NA	Analysis	8082A		50	672790	SS	EET CHI	09/01/22 18:48

Client Sample ID: Dark Green L-Wall

Lab Sample ID: 500-221198-5

Date Collected: 08/22/22 15:35

Matrix: Solid

Date Received: 08/23/22 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672590	EK	EET CHI	08/31/22 13:39 - 08/31/22 17:30 ¹
Total/NA	Analysis	8082A		100	672934	SB	EET CHI	09/02/22 10:43

Client Sample ID: Green Upper Wall

Lab Sample ID: 500-221198-6

Date Collected: 08/22/22 15:45

Matrix: Solid

Date Received: 08/23/22 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672590	EK	EET CHI	08/31/22 13:39 - 08/31/22 17:30 ¹
Total/NA	Analysis	8082A		100	672934	SB	EET CHI	09/02/22 10:58

Lab Chronicle

Client: Wood E&I Solutions Inc
Project/Site: McKinley School

Job ID: 500-221198-1

Client Sample ID: Red Lower Wall

Date Collected: 08/22/22 15:55

Date Received: 08/23/22 10:25

Lab Sample ID: 500-221198-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672590	EK	EET CHI	08/31/22 13:39 - 08/31/22 17:30 ¹
Total/NA	Analysis	8082A		20	672790	SS	EET CHI	09/01/22 19:33

Client Sample ID: Pink Upper Wall

Date Collected: 08/22/22 16:00

Date Received: 08/23/22 10:25

Lab Sample ID: 500-221198-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672590	EK	EET CHI	08/31/22 13:39 - 08/31/22 17:30 ¹
Total/NA	Analysis	8082A		20	672790	SS	EET CHI	09/01/22 19:48

Client Sample ID: Lt Blue Upper Wall

Date Collected: 08/22/22 16:15

Date Received: 08/23/22 10:25

Lab Sample ID: 500-221198-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672590	EK	EET CHI	08/31/22 13:39 - 08/31/22 17:30 ¹
Total/NA	Analysis	8082A		20	672790	SS	EET CHI	09/01/22 20:02

Client Sample ID: Dk Blue Lower Wall

Date Collected: 08/22/22 16:20

Date Received: 08/23/22 10:25

Lab Sample ID: 500-221198-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672590	EK	EET CHI	08/31/22 13:39 - 08/31/22 17:30 ¹
Total/NA	Analysis	8082A		20	672790	SS	EET CHI	09/01/22 15:50

Client Sample ID: Grey-Foyer

Date Collected: 08/22/22 16:40

Date Received: 08/23/22 10:25

Lab Sample ID: 500-221198-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672590	EK	EET CHI	08/31/22 13:39 - 08/31/22 17:30 ¹
Total/NA	Analysis	8082A		20	672790	SS	EET CHI	09/01/22 16:05

Client Sample ID: White-Foyer

Date Collected: 08/22/22 16:45

Date Received: 08/23/22 10:25

Lab Sample ID: 500-221198-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672590	EK	EET CHI	08/31/22 13:39 - 08/31/22 17:30 ¹
Total/NA	Analysis	8082A		20	672790	SS	EET CHI	09/01/22 16:20

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Lab Chronicle

Client: Wood E&I Solutions Inc
Project/Site: McKinley School

Job ID: 500-221198-1

Client Sample ID: Light Purple U-Wall

Lab Sample ID: 500-221198-13

Date Collected: 08/22/22 16:55

Matrix: Solid

Date Received: 08/23/22 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672590	EK	EET CHI	08/31/22 13:39 - 08/31/22 17:30 ¹
Total/NA	Analysis	8082A		100	672934	SB	EET CHI	09/02/22 11:13

Client Sample ID: Dark Purple L-Wall

Lab Sample ID: 500-221198-14

Date Collected: 08/22/22 17:05

Matrix: Solid

Date Received: 08/23/22 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672590	EK	EET CHI	08/31/22 13:39 - 08/31/22 17:30 ¹
Total/NA	Analysis	8082A		100	672934	SB	EET CHI	09/02/22 11:27

Client Sample ID: Brown-Basement Hall

Lab Sample ID: 500-221198-15

Date Collected: 08/22/22 17:30

Matrix: Solid

Date Received: 08/23/22 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3541			672590	EK	EET CHI	08/31/22 13:39 - 08/31/22 17:30 ¹
Total/NA	Analysis	8082A		200	672934	SB	EET CHI	09/02/22 11:42

Client Sample ID: McKinley Ceramic Comp

Lab Sample ID: 500-221198-16

Date Collected: 08/22/22 18:10

Matrix: Solid

Date Received: 08/23/22 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
TCLP	Leach	1311			672837	EA	EET CHI	09/01/22 14:30 - 09/02/22 08:30 ¹
TCLP	Prep	3010A			673056	LMB	EET CHI	09/02/22 16:59 - 09/02/22 17:29 ¹
TCLP	Analysis	6010C		1	673405	JJB	EET CHI	09/06/22 22:05
TCLP	Leach	1311			672837	EA	EET CHI	09/01/22 14:30 - 09/02/22 08:30 ¹
TCLP	Prep	7470A			673234	MJG	EET CHI	09/06/22 11:15 - 09/06/22 13:15 ¹
TCLP	Analysis	7470A		1	673473	MJG	EET CHI	09/07/22 10:52

¹ Completion dates and times are reported or not reported per method requirements or individual lab discretion.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Wood E&I Solutions Inc
Project/Site: McKinley School

Job ID: 500-221198-1

Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Chain of Custody Record

538778




Environment Testing
TestAmerica

TAL-8210

Address _____

Regulatory Program: DW NPDES RCRA Other

Client Contact		Project Manager			Site Contact		Date		COC No		
Company Name WOOD		Tel/Email			Lab Contact		Carrier		_____ of _____ COCs		
Address 2412 NE SVAKA		Analysis Turnaround Time			 500-221198 COC		Perform MS / MSD (Y / N) PCB		Sampler		
City/State/Zip		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS							For Lab Use Only		
Phone 309-253-2169		TAT if different from Below _____							Walk-in Client		
Fax		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day							Lab Sampling		
Project Name CITY OF PEORIA									Job / SDG No		
Site MCKINLEY SCHOOL					500-221198		Sample Specific Notes				
P O #											
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)			
LT GREEN SE ROOM		8/22/22	1450	G	PART 1			X			
WHITE KITCHEN GUCET			1500					X			
YELLOW FOYER HALL			1515					X			
Beige FOYER HALL			1525					X			
DARK GREEN L-WALL			1535					X			
GREEN UPPER WALL			1545					X			
Red Lower wall			1555					X			
PINK UPPER WALL			1600					X			
LT BLUE UPPER WALL			1615					X			
DK BLUE Lower wall			1620					X			
GREY- FOYER			1640					X			
WHITE- FOYER			1645					X			
Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4= HNO3, 5= NaOH, 6= Other											
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
<input type="checkbox"/> Non Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown						<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months					
Special Instructions/QC Requirements & Comments:											
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No			Cooler Temp (°C) Obs'd 5.8 Corr'd 3.8		Therm ID No _____				
Relinquished by _____		Company WOOD		Date/Time 8/22/22 1445		Received by _____		Company _____		Date/Time _____	
Relinquished by _____		Company _____		Date/Time _____		Received by _____		Company _____		Date/Time _____	
Relinquished by _____		Company _____		Date/Time _____		Received in Laboratory by Shirley Scott		Company ETA		Date/Time 8/22 8/23/22 1025	

1
2
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4
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15

Chain of Custody Record

538779



Environment Testing
TestAmerica

Address _____

Regulatory Program: DW NPDES RCRA Other

TAL-8210

Client Contact		Project Manager			Site Contact		Date		COC No		
Company Name WOOD		Tel/Email			Lab Contact		Carrier		_____ of _____ COCs		
Address 2412 NEBYANKA		Analysis Turnaround Time			Filtered Sample (Y/N) Perform MS/MSD (Y/N) PCB TCP RERA METALS				Sampler: For Lab Use Only. Walk-in Client Lab Sampling Job / SDG No 500-221198		
City/State/Zip		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS									
Phone		TAT if different from Below _____									
Fax		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day									
Project Name city of peoria		Sample Date			Sample Time		Sample Type (C=Comp, G=Grab)		Matrix		
Site mckinley school										# of Cont.	
PO #										Sample Specific Notes	
13 LIGHT PURPLE N-WALL		8/22/22		1655		G PAINT		1		X	
14 DARK PURPLE L-WALL		↓		1705		↓ ↓ ↓		↓ ↓ ↓		X	
15 BROWN-BASEMENT HALL		↓		1730		↓ ↓ ↓		↓ ↓ ↓		X	
16 mckinley ceramic comp		8/22/22		1810		C TILE		1		X	
Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other											
Possible Hazard Identification Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
<input type="checkbox"/> Non Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown						<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months					
Special Instructions/QC Requirements & Comments:											
Cus ody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No			Cooler Temp (°C) Obs'd _____		Corr'd _____		Therm ID No _____		
Requished by _____		Company wood		Date/Time 8/22/22		Received by _____		Company _____		Date/Time _____	
Requished by _____		Company _____		Date/Time _____		Received by _____		Company _____		Date/Time _____	
Requished by _____		Company _____		Date/Time _____		Received in Laboratory by _____		Company RERA		Date/Time 8/23/22 1025	

Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 500-221198-1

Login Number: 221198

List Number: 1

Creator: Scott, Sherri L

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix B

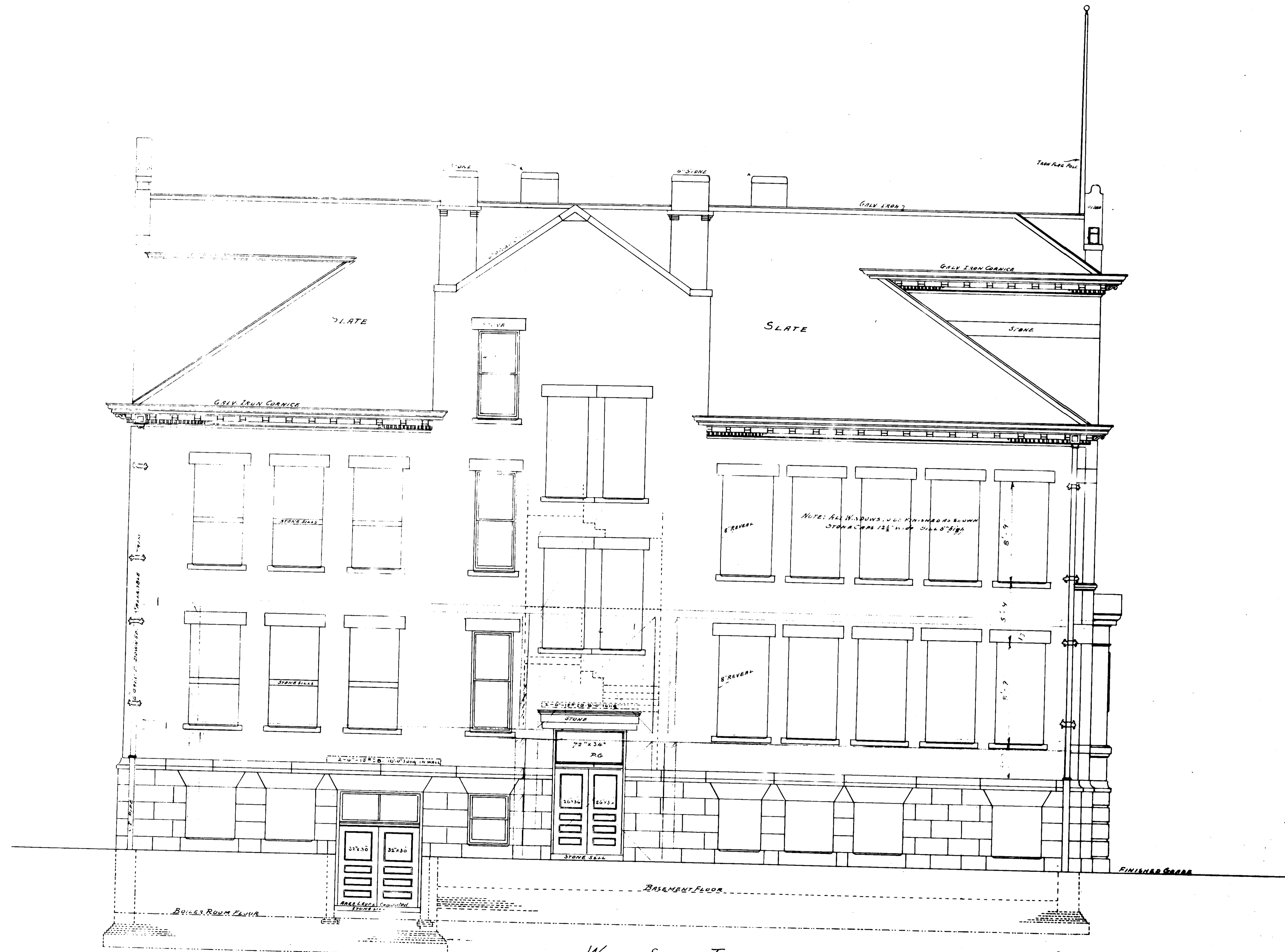
Owner Files and Drawings

DRAWING NUMBER 3
 N. K. RILEY
 ELEVATION
 ALBERT KIMPER, 1921
 PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
 REGISTERED ARCHITECT

DRAWING NUMBER
 PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
 REGISTERED ARCHITECT

DRAWING NUMBER
 PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
 REGISTERED ARCHITECT

DRAWING NUMBER
 PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
 REGISTERED ARCHITECT



WEST SIDE ELEVATION

SCALE 1/4" = 1'

ALBERT KIMPER
 ARCHITECT
 40-41 HOULDER BLDG. THORIN, ILL.

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER 12

DRAWING NUMBER

SARGO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

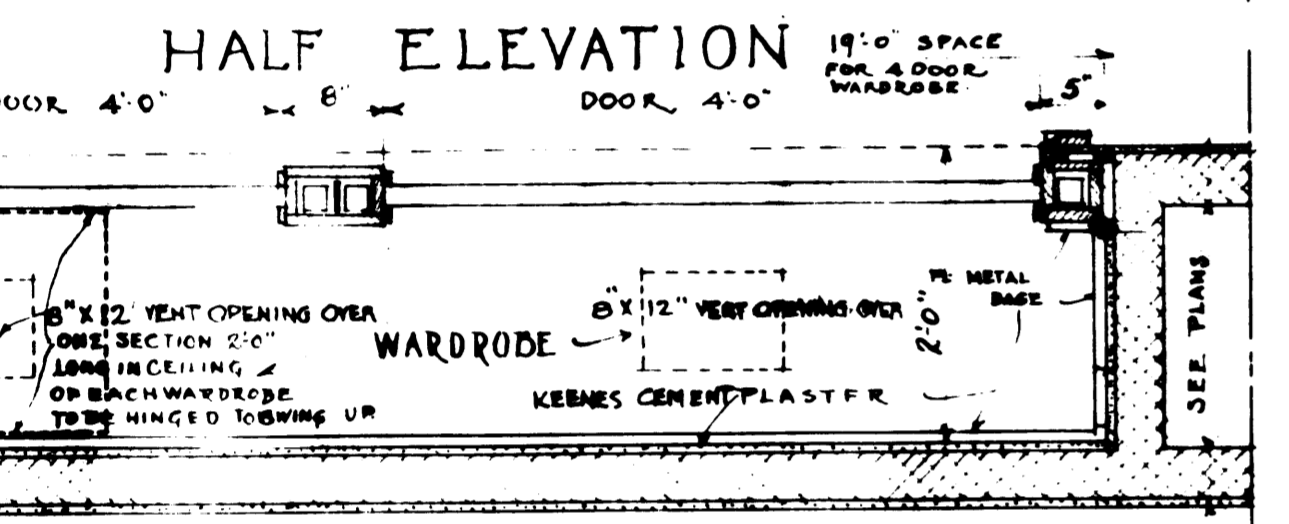
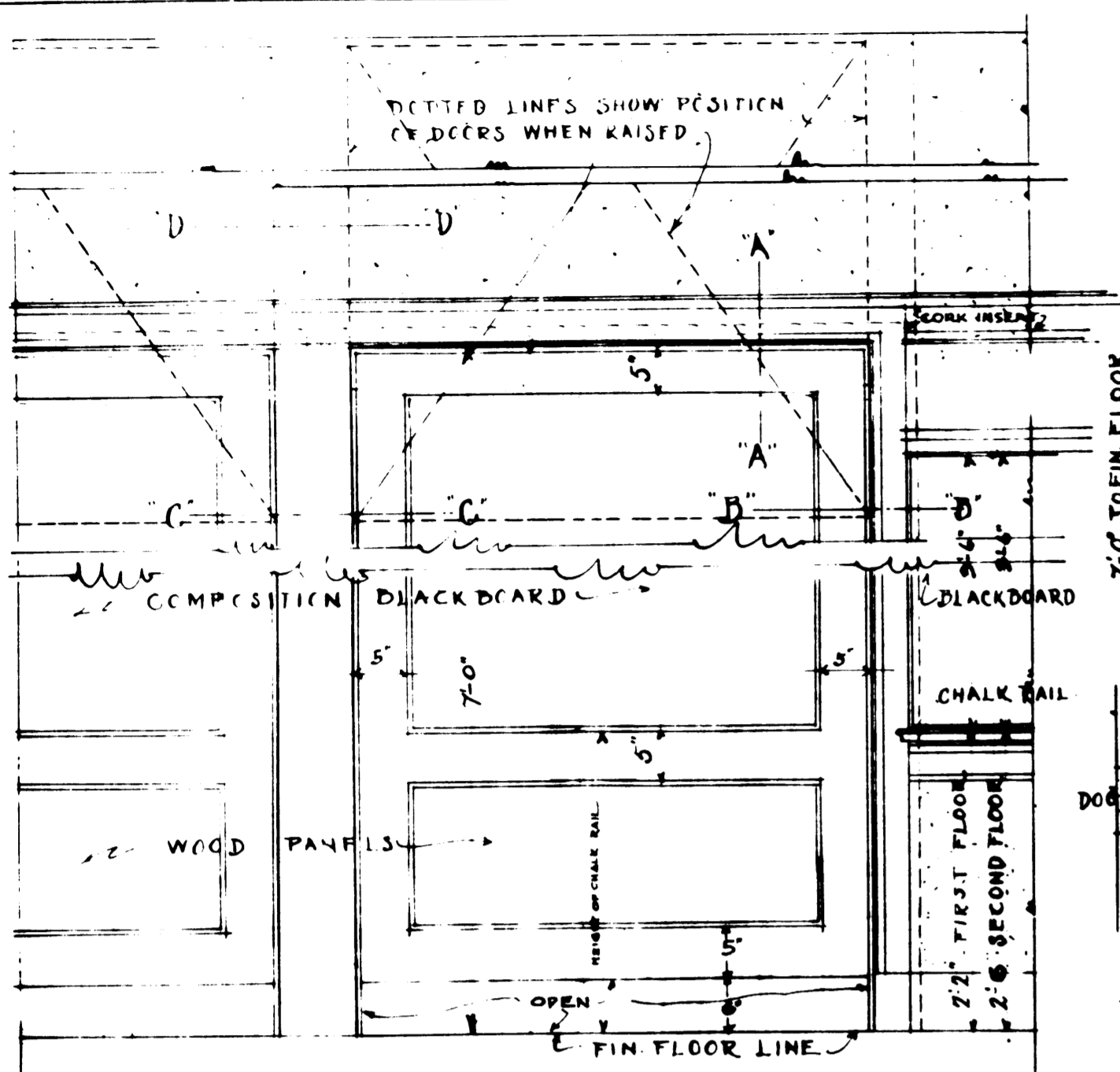
SARGO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

SARGO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

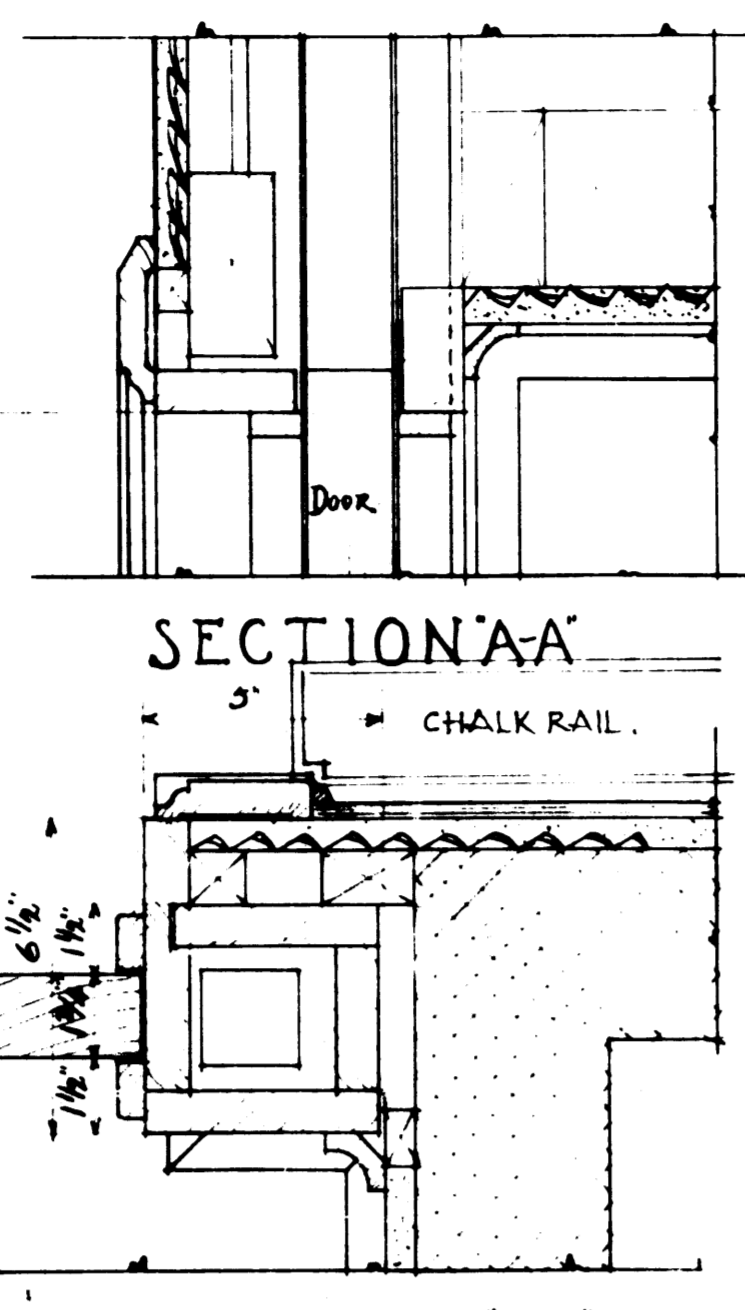
01.19-8-20-21 BLUL
Room 1 File Cab. # 1
Details

Harrison
Details
Hewitt-Emerson 8-20-21
SARGO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

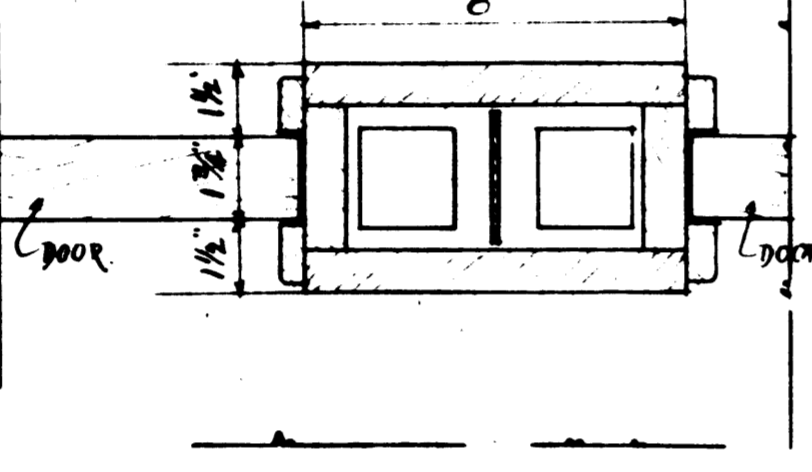
SARGO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553



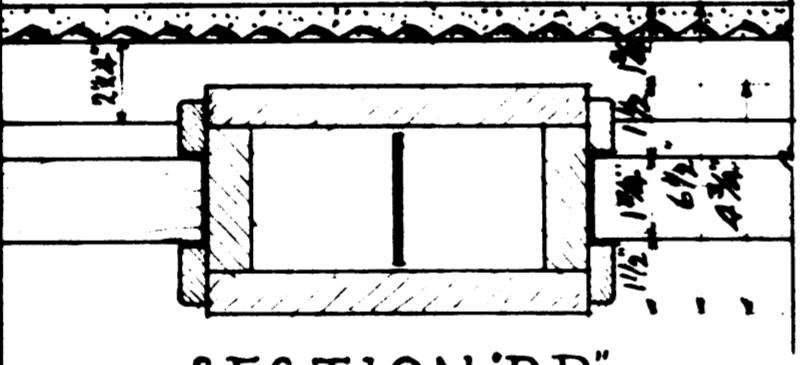
HALF PLAN
DETAILS OF WARDROBES
SCALE 3/4" = 1 FOOT



SECTION 'AA'

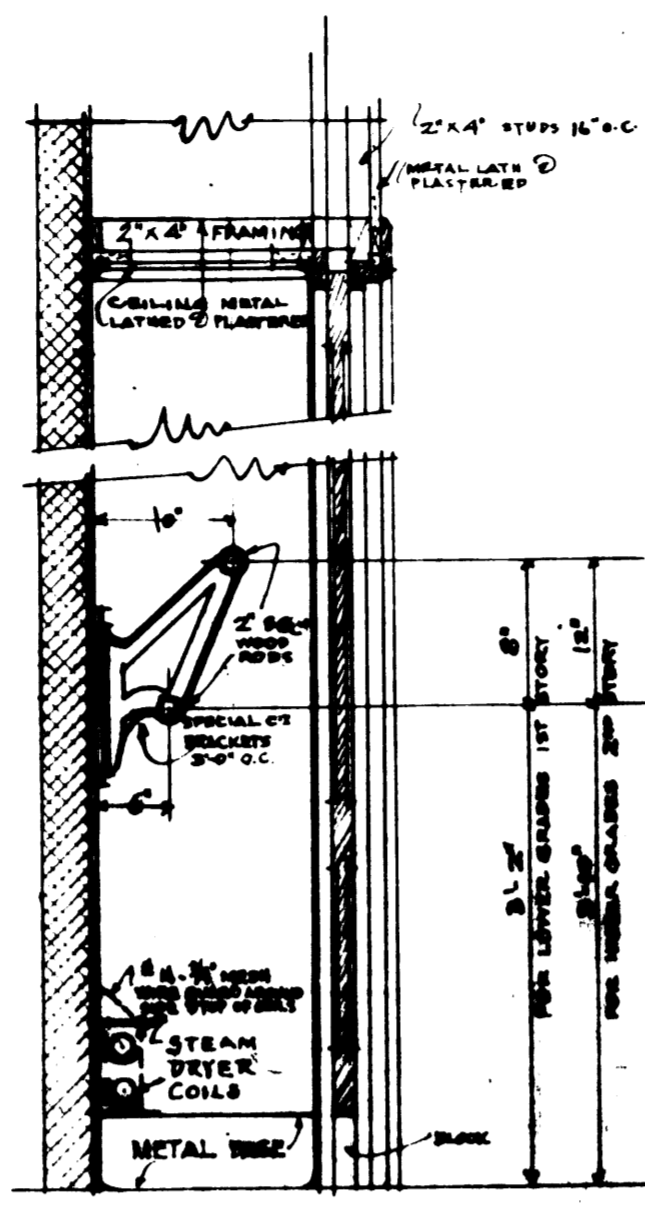


SECTION 'BB'

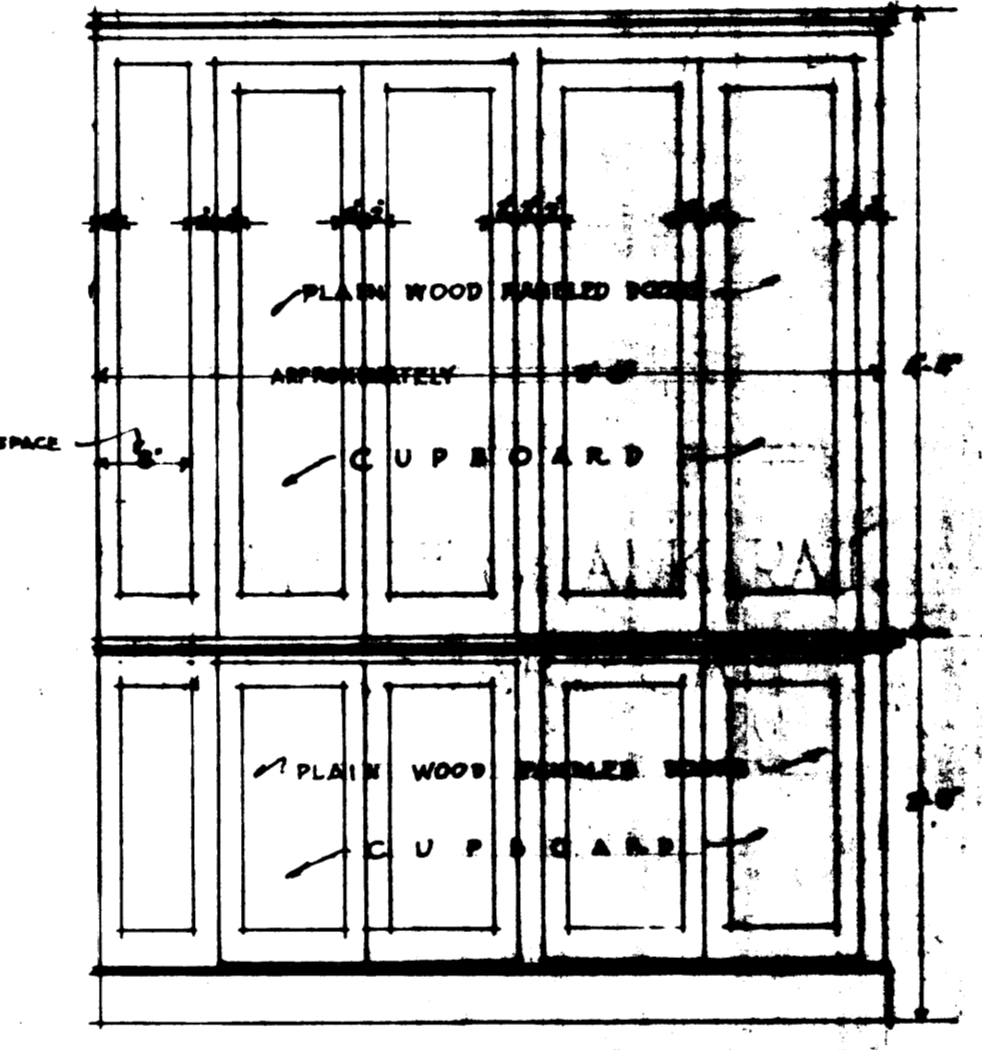


SECTION 'CC'

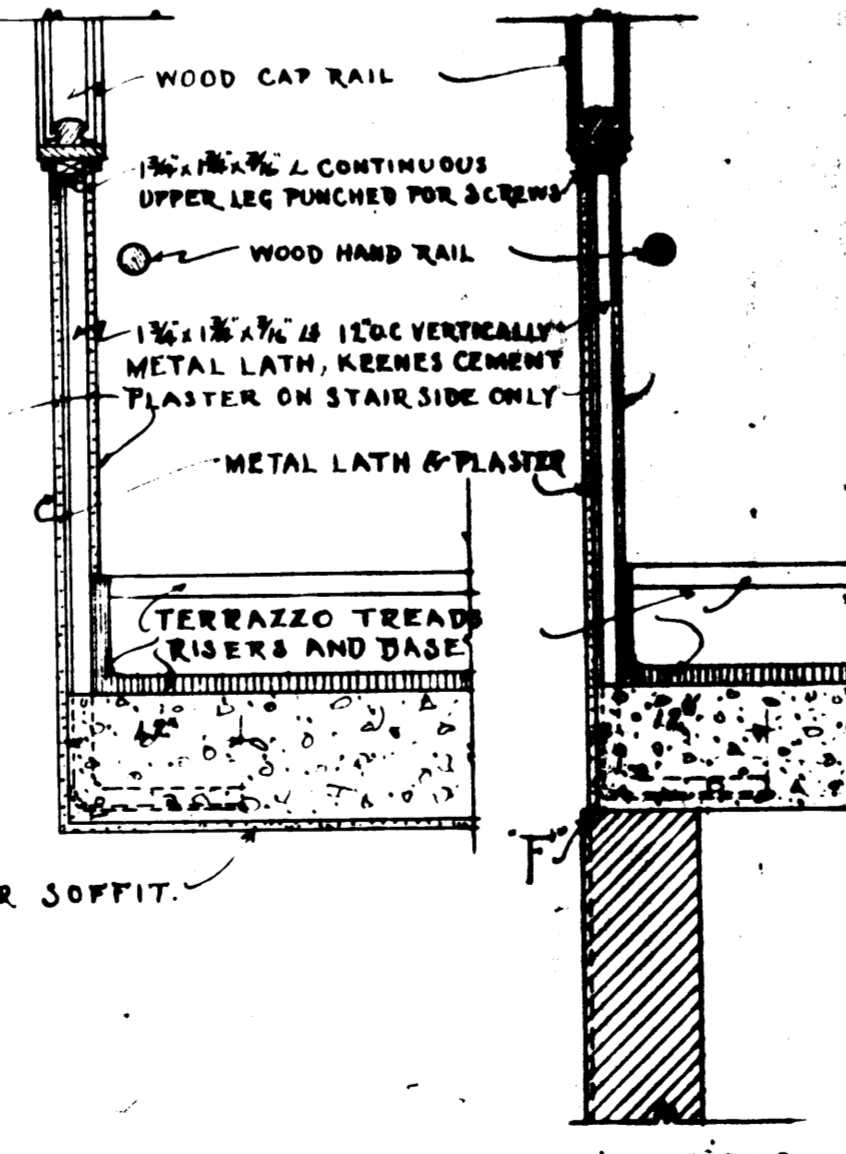
DETAILS OF WARDROBES
SCALE 3" = 1 FOOT



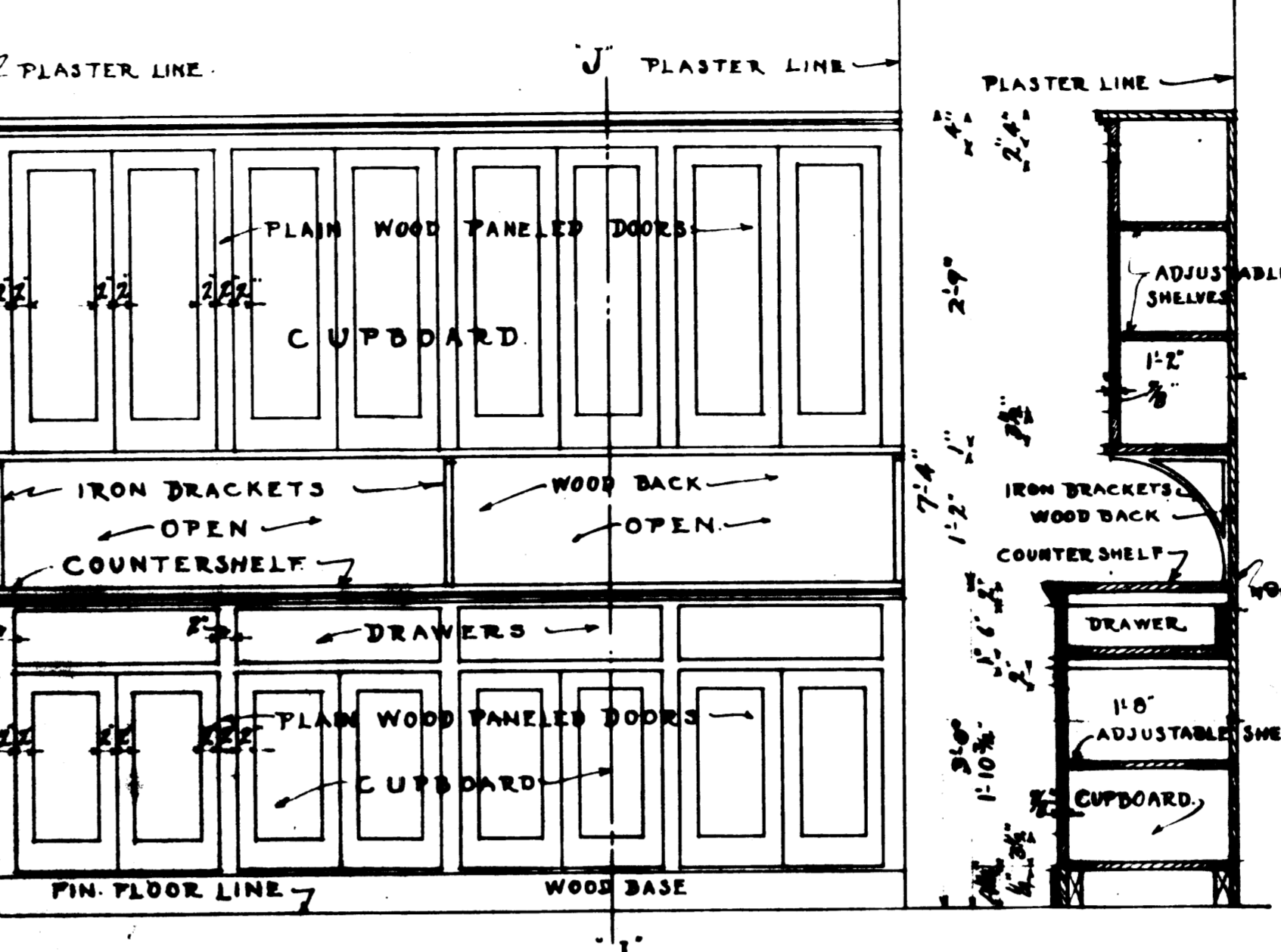
SECTION THRU WARDROBE
SCALE 3/4" = 1 FOOT



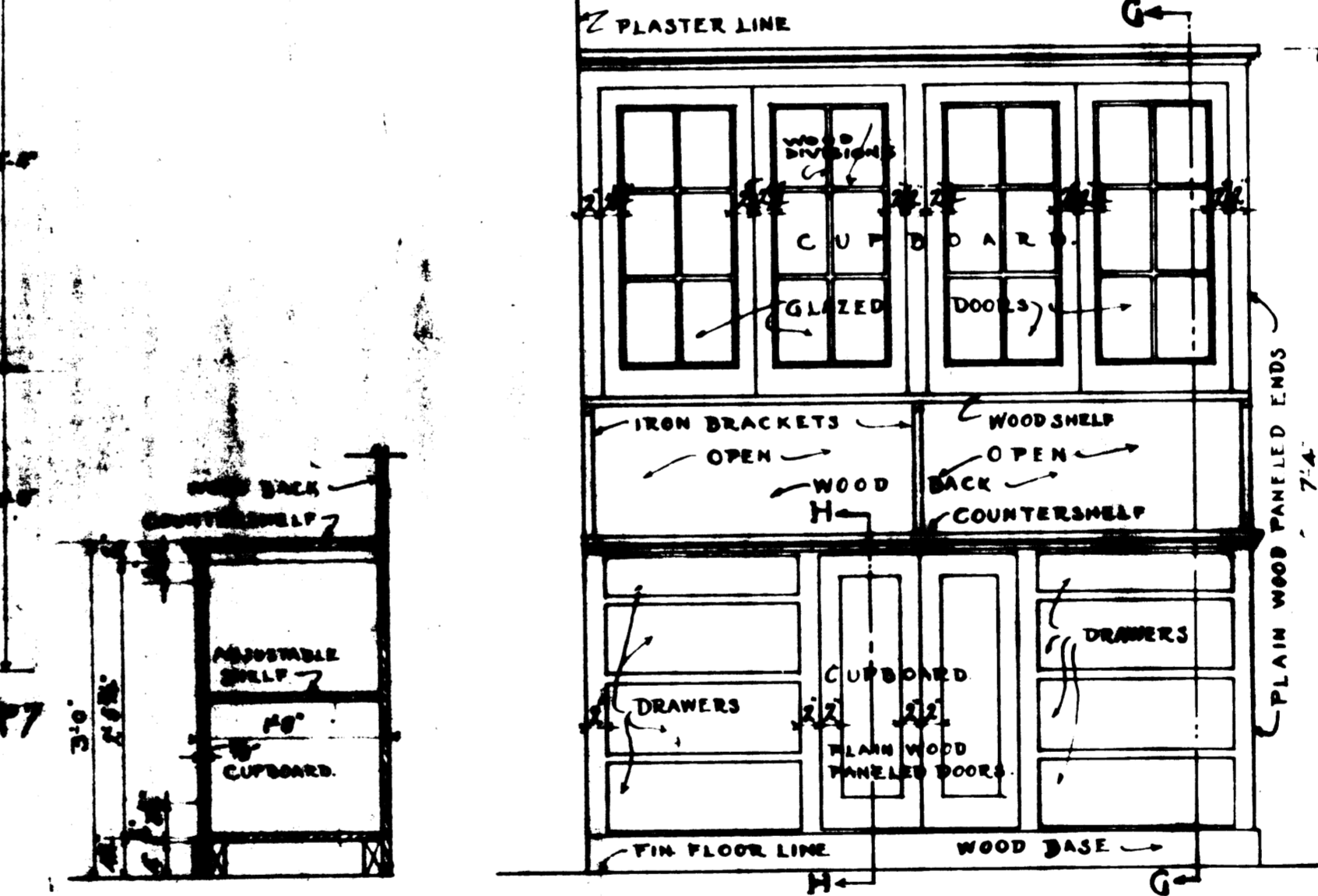
DETAIL OF CASE 'B' KITCHEN #7
SECTION THRU CASE SIMILAR TO CASE 'A' SAME ROOM



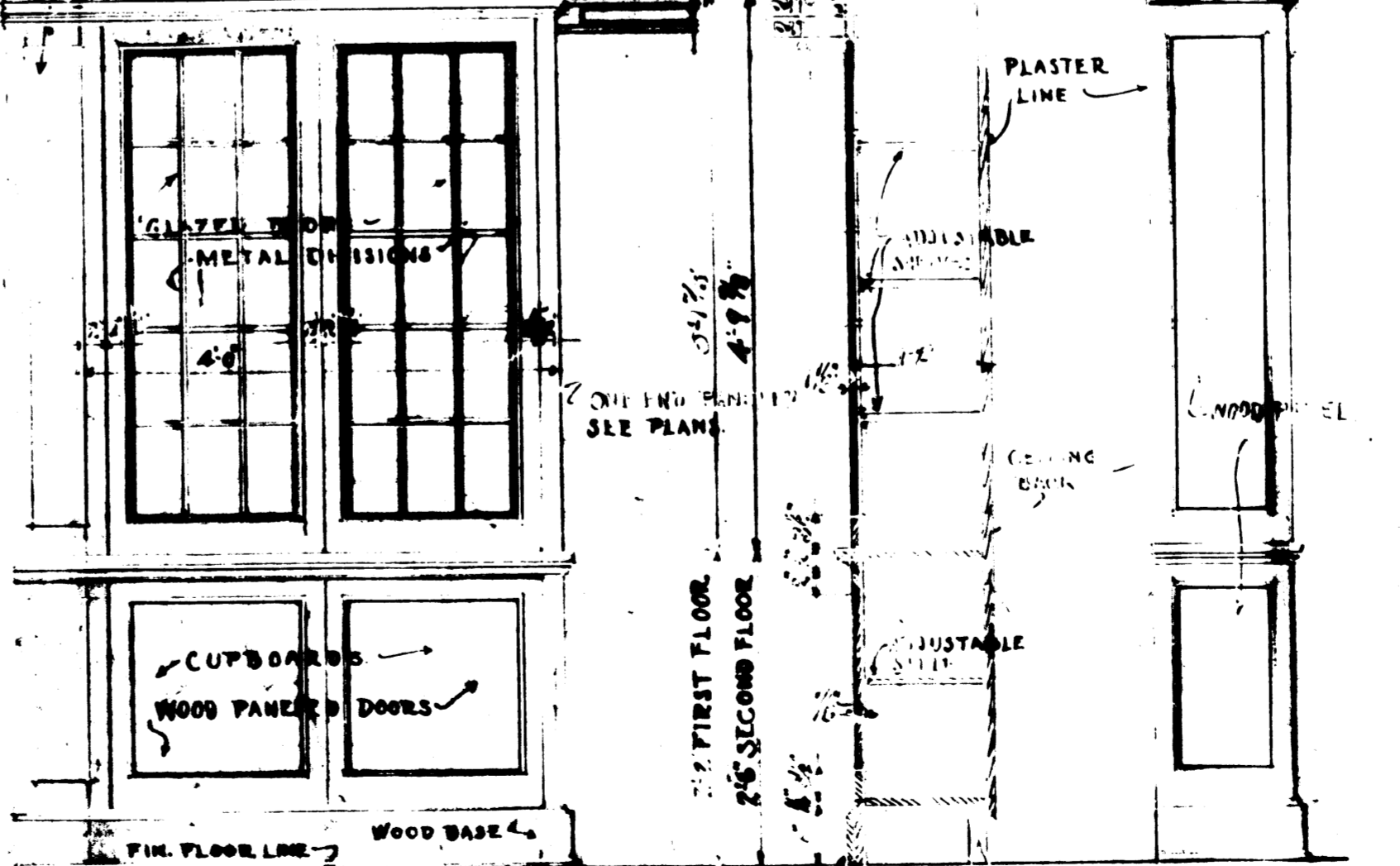
SECTION SECTION



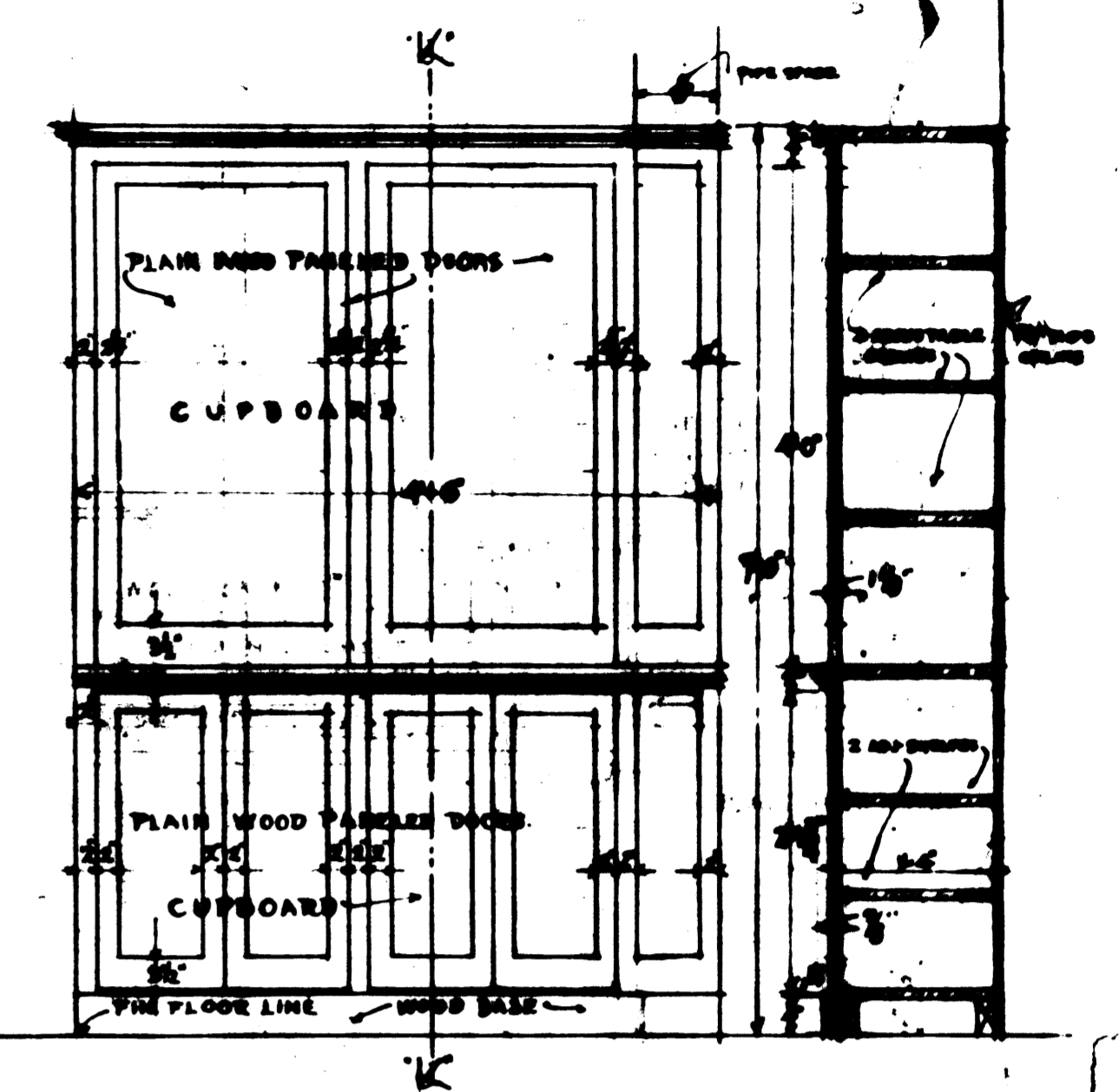
ELEVATION SECTION 'J-J'
DETAIL OF CASE IN KITCHEN #15
SCALE 3/4" = 1 FOOT



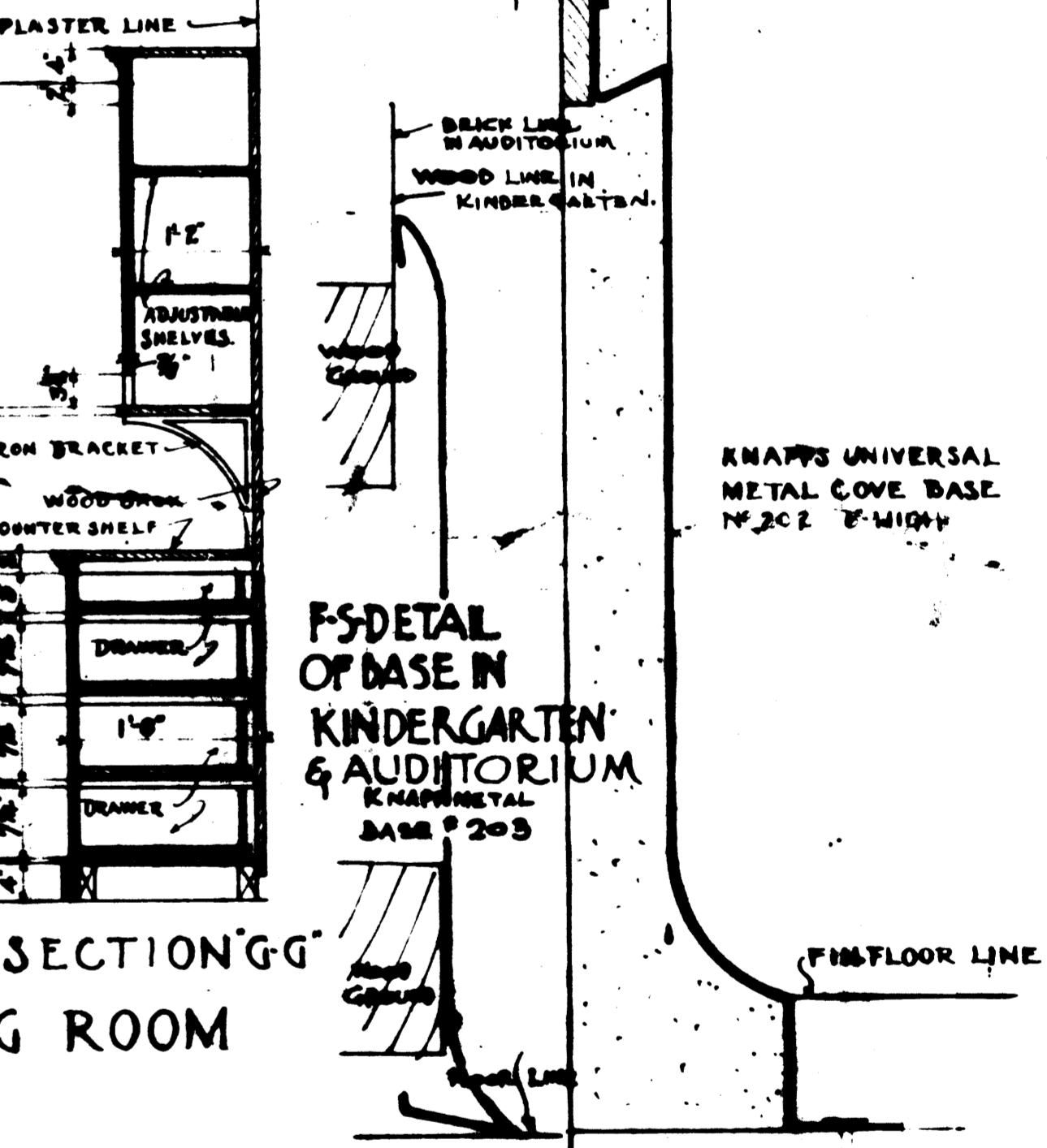
SECTION 'H-H'
ELEVATION SECTION 'G-G'
DETAIL OF CASE IN DINING AND SEWING ROOM



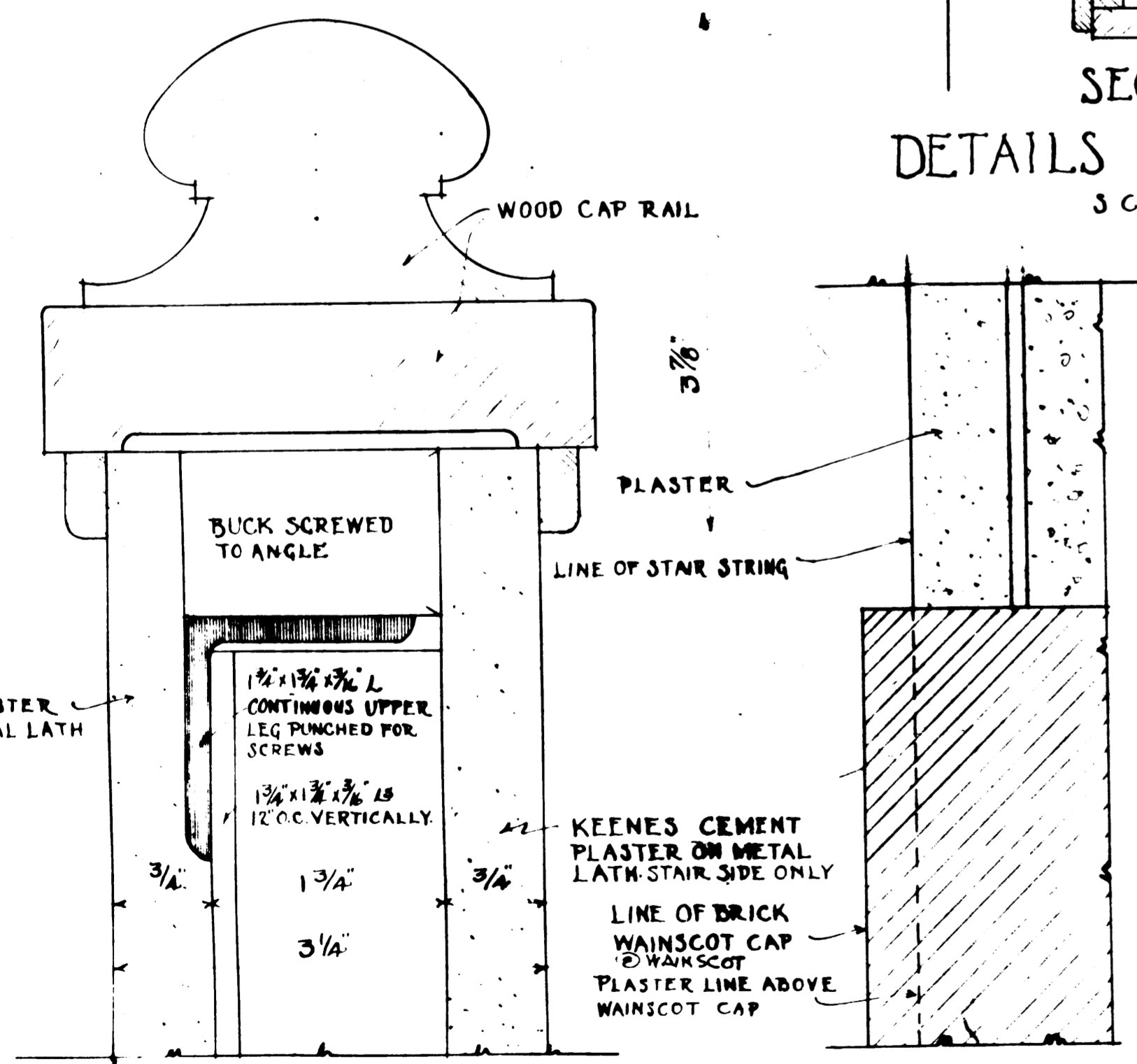
ELEVATION SECTION END ELEVATION
DETAILS OF BOOKCASES IN TEACHERS & CLASS ROOMS
SCALE 3/4" = 1 FOOT



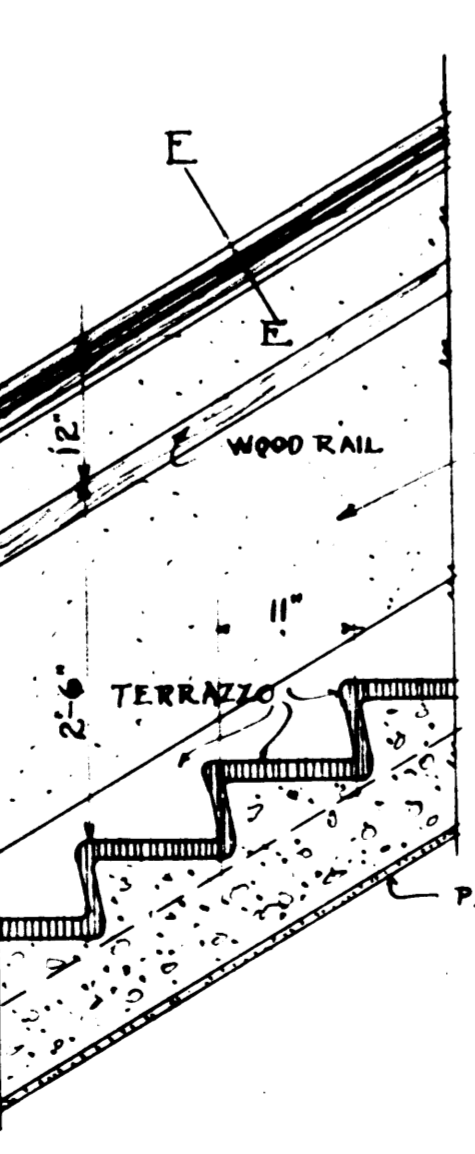
ELEVATION SECTION 'K-K'
DETAIL OF CASE 'A' IN KITCHEN #7
SCALE 3/4" = 1 FOOT



F.S. TYPICAL BASE



F.S. SECTION 'EE'



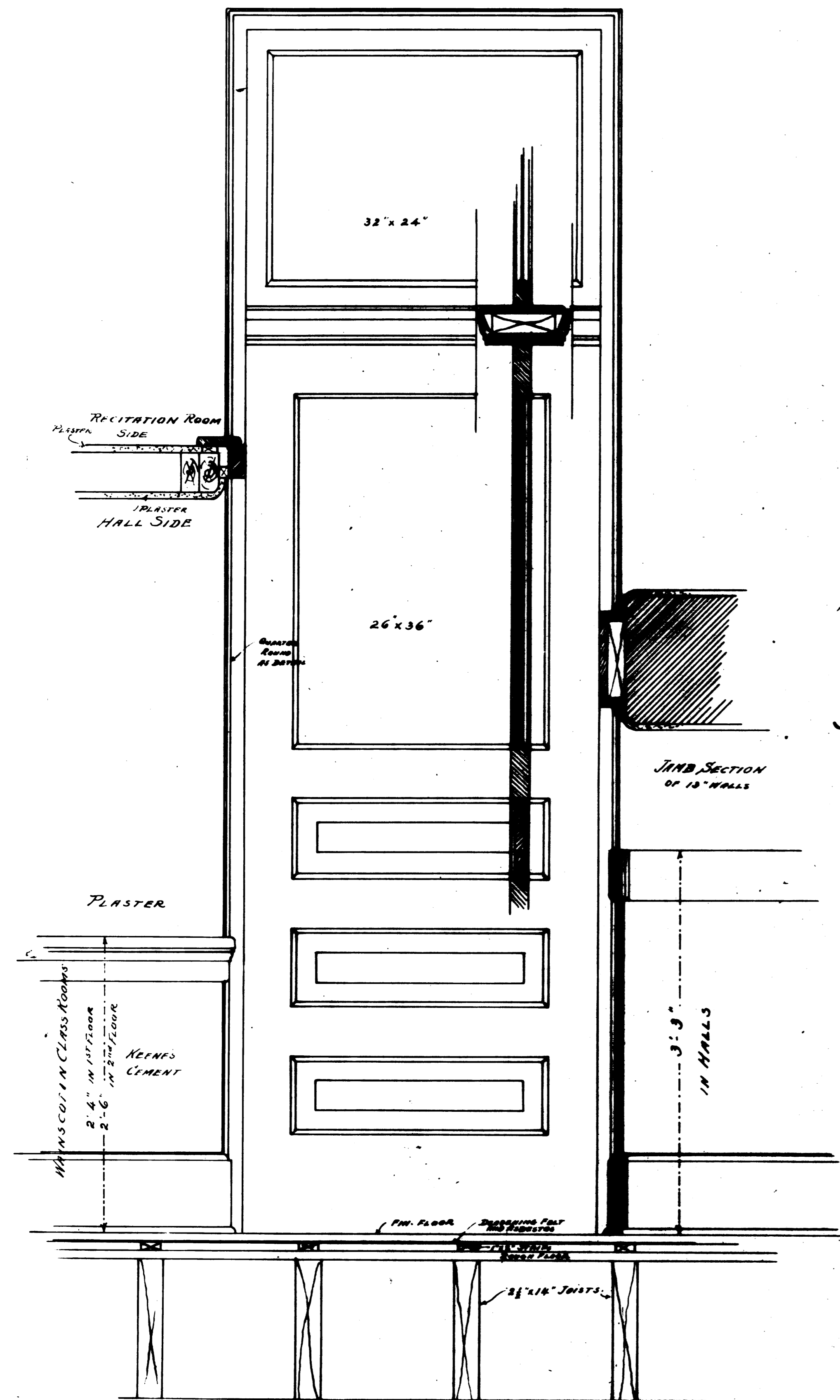
F.S. DETAIL AT 'F'

ELEVATION

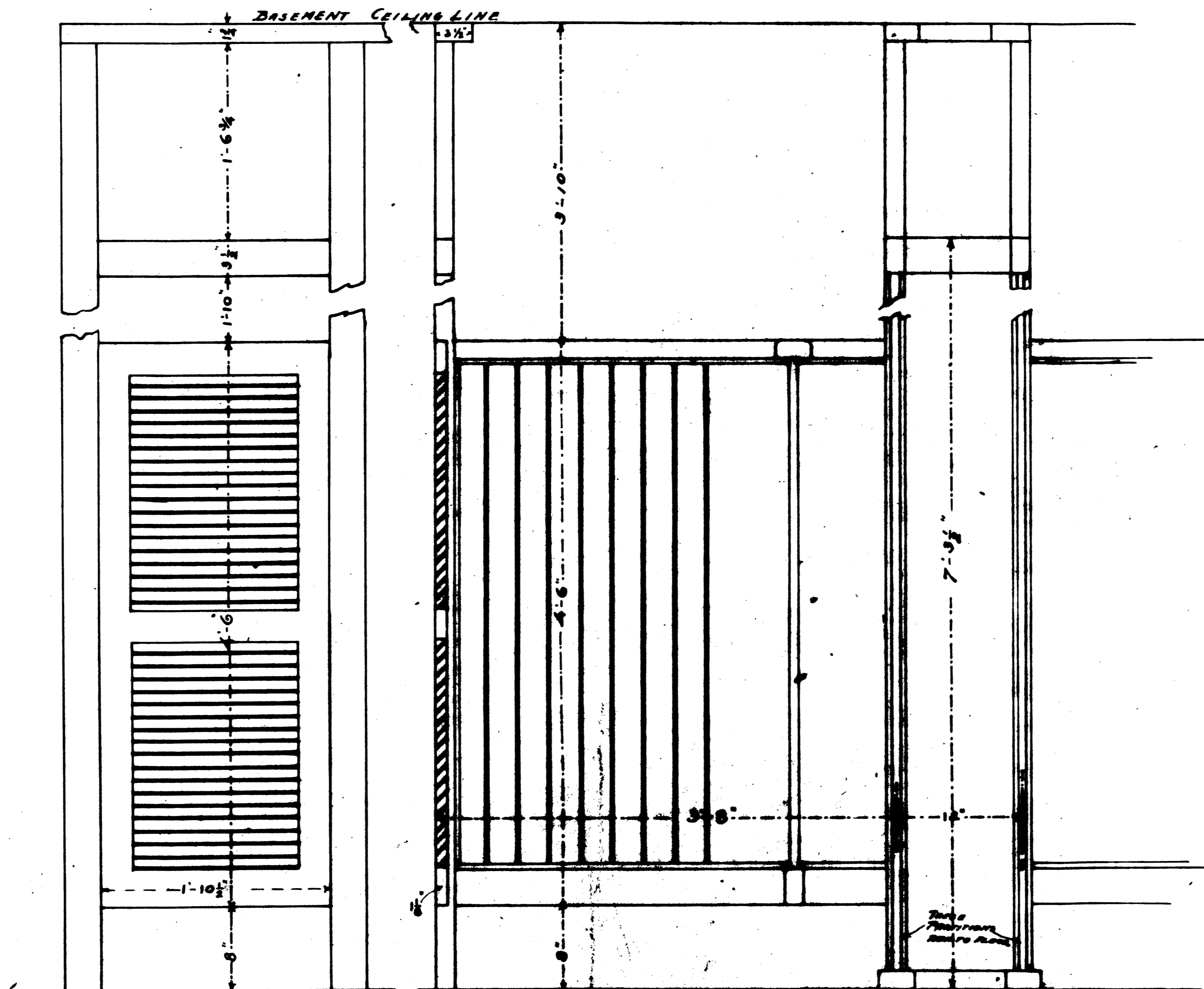
3/4" SCALE AND FULL SIZE DETAILS OF STAIRS

ADDITION AND ALTERATIONS
FOR THE
HARRISON SCHOOL, PEORIA, ILL.

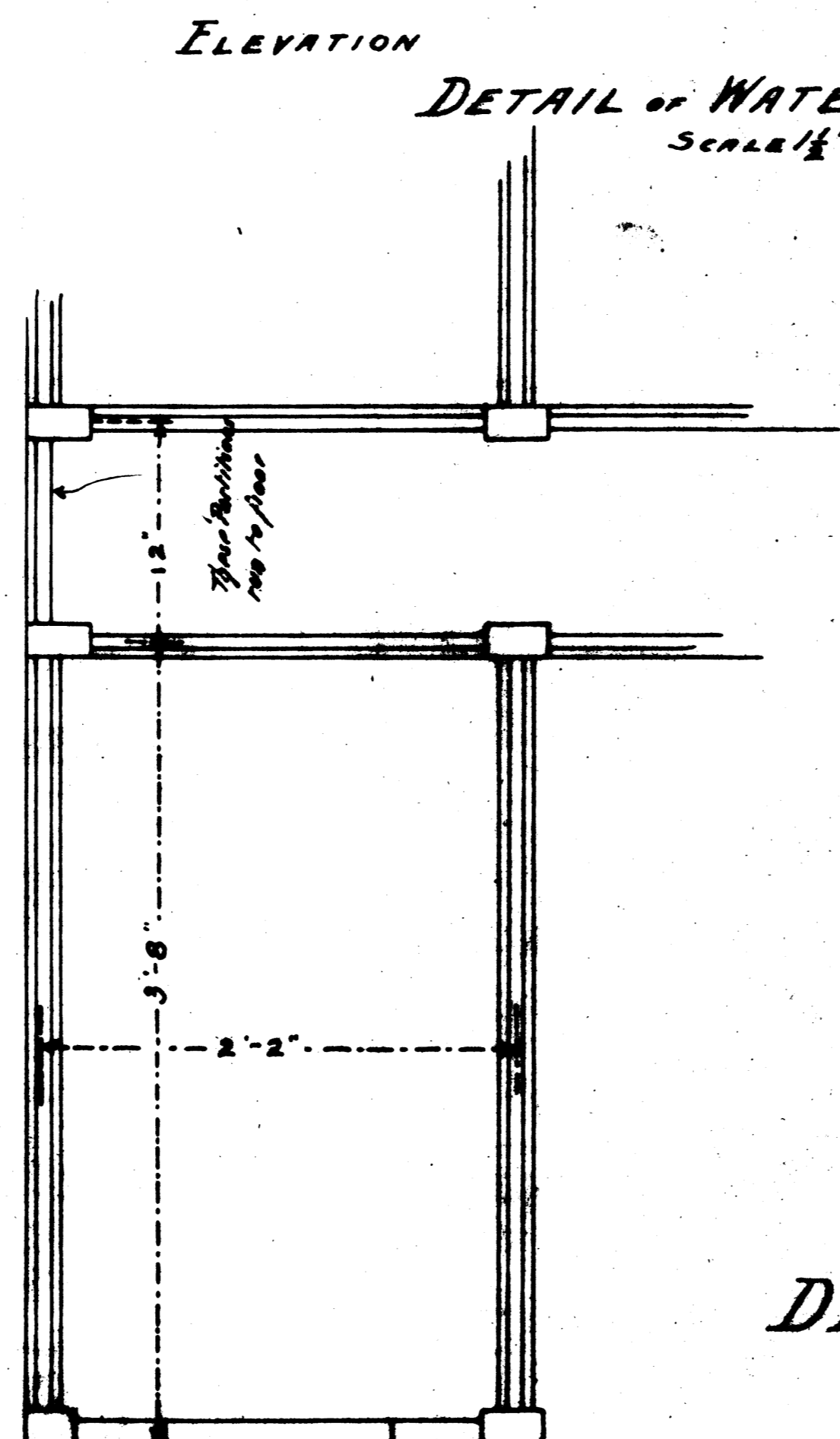
OF NO. 949
DRAWN BY A.C. HARRISON
CHECKED BY A.C. HARRISON
APPROVED BY H.W. EMERSON
ARCHITECTS
12



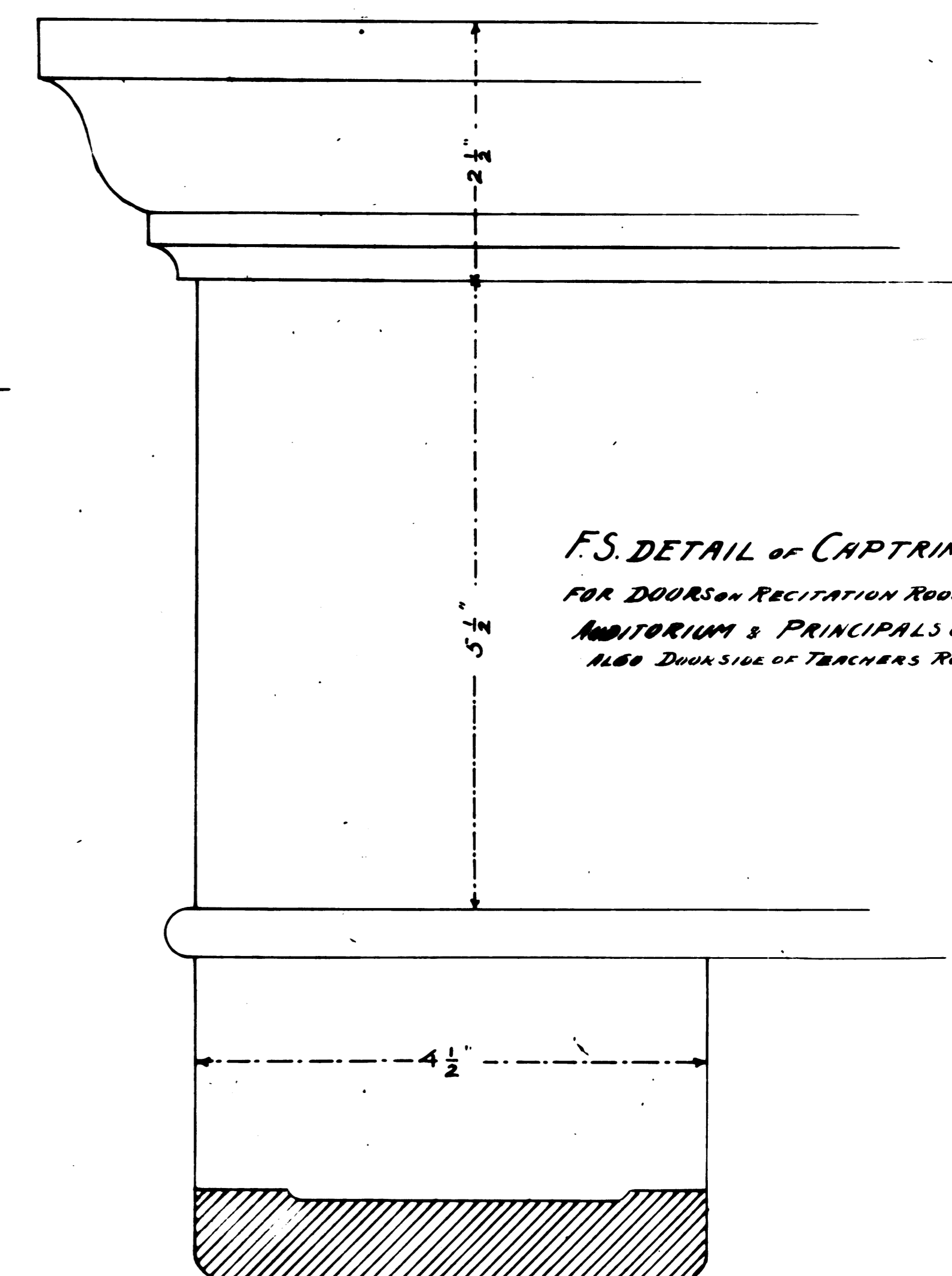
TYPICAL DETAIL OF DOORS SCALE 1/2"=1'



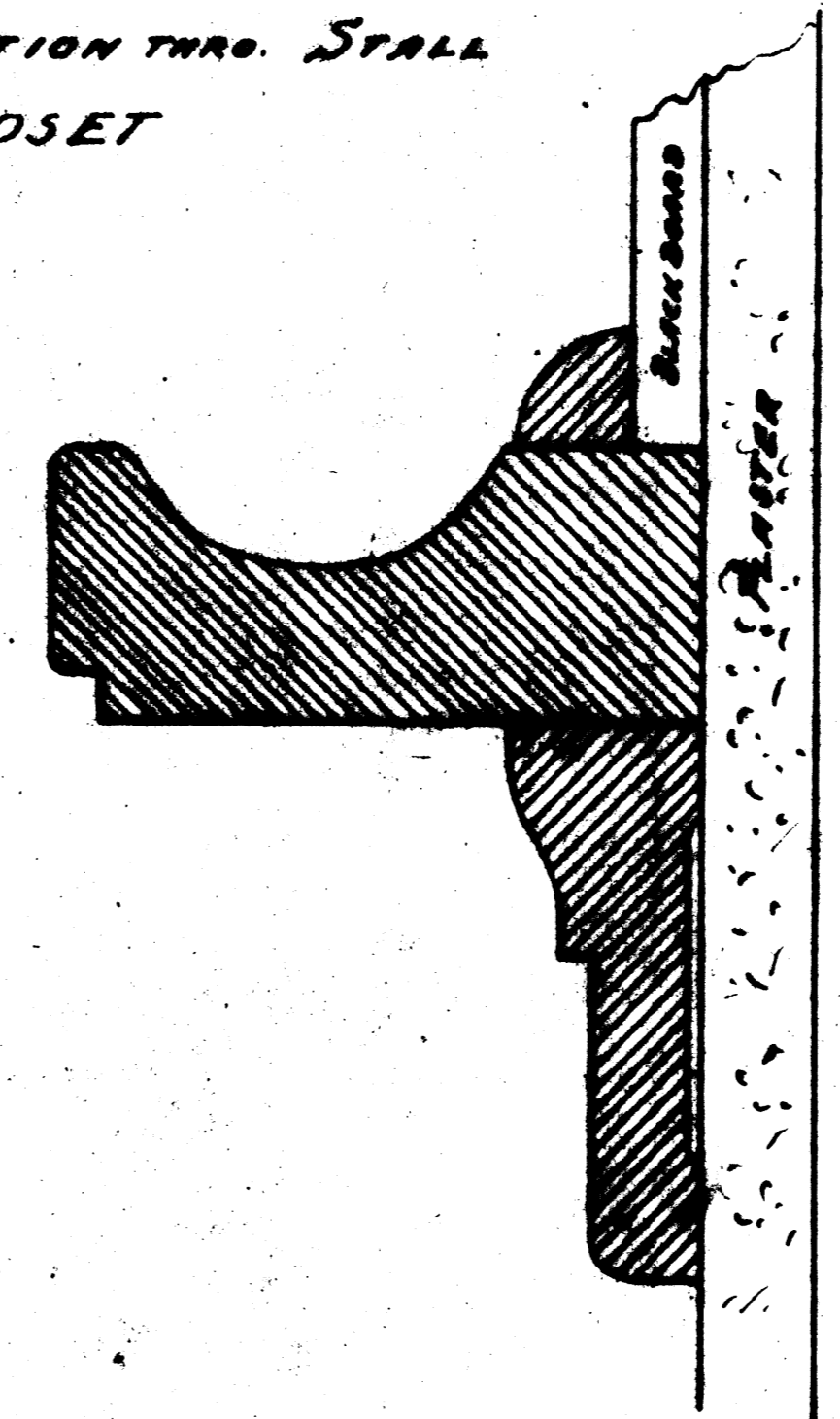
ELEVATION SECTION THRO. STALL
DETAIL OF WATER CLOSET SCALE 1/2"=1'



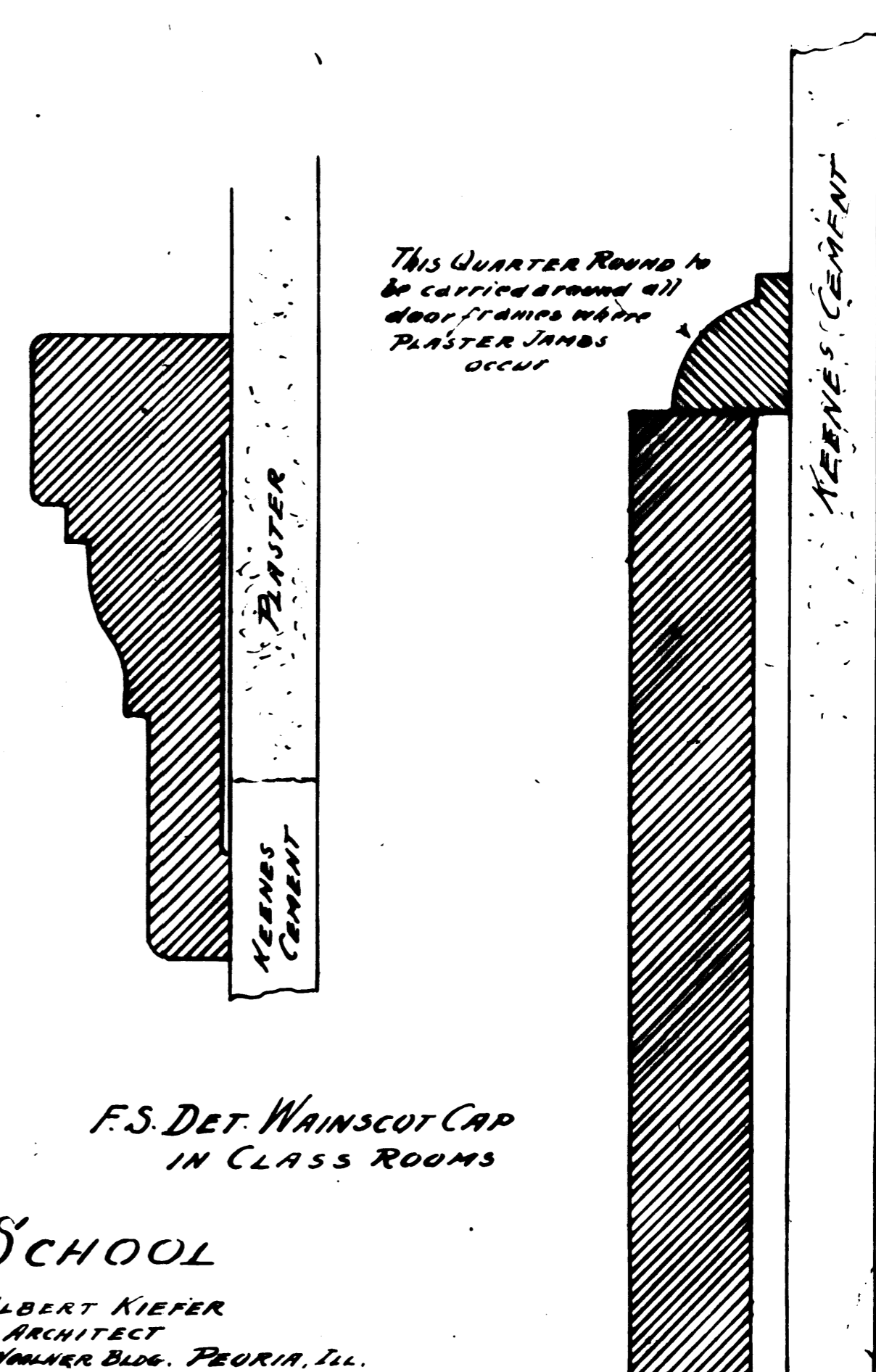
PLAN OF CLOSET



F.S. DETAIL OF CAPTRIM FOR DOORS ON RECIATION ROOMSIDE AUDITORIUM & PRINCIPALS OFFICE ALSO DOOR SIDE OF TEACHERS ROOM



F.S. DET. CHALK RAIL



F.S. DET. WAINSCOT CAP IN CLASS ROOMS

THIS QUARTER ROUND IS TO BE CARRIED AROUND ALL DOOR FRAMES WHERE PLASTER JANBS OCCUR

F.S. DET. OF BASE

DETAILS FOR EIGHT ROOM SCHOOL

ALBERT KIEFER ARCHITECT
40-41 WALKER BLDG. PEORIA, ILL.

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

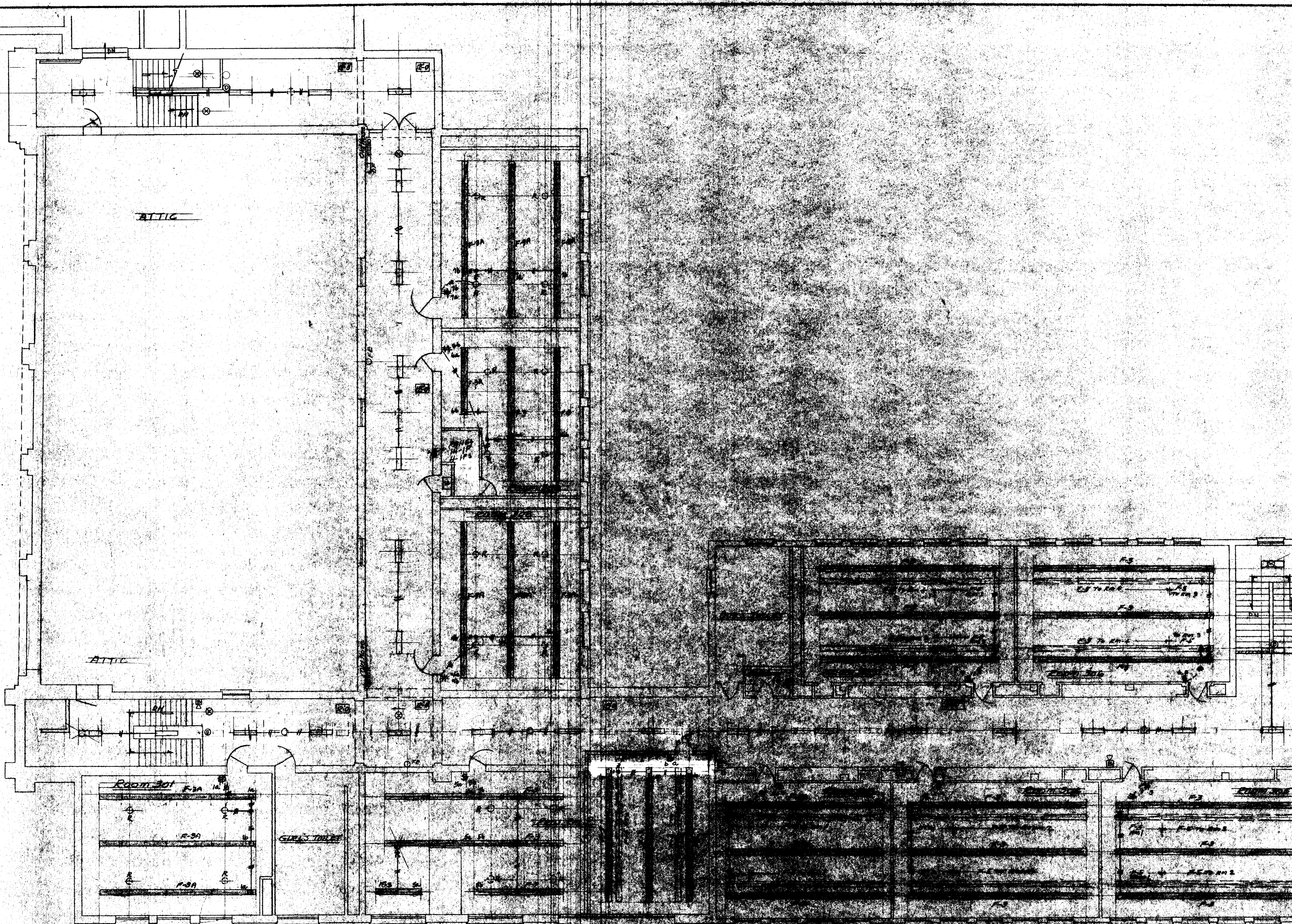
SAFCD PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553
POSITION EDGE OF PRINT ON THIS LINE

SAFCD PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553
POSITION EDGE OF PRINT ON THIS LINE

SAFCD PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553
POSITION EDGE OF PRINT ON THIS LINE

01.19-1-2-73 BLUL
Room 1 File Cab. # 1
Third Floor
SAFCD PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553
POSITION EDGE OF PRINT ON THIS LINE

Harrison
Third Floor
G.L. Tinsman 1-2-73
SAFCD PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553
POSITION EDGE OF PRINT ON THIS LINE



100 88 73-11	ALTERATION TO HARRISON
DATE July 27 73	FOR PEORIA PUBLIC SCHOOL
	SCHOOL DISTRICT NO. 150
	GORDON L. TINSMAN A.L.A. ARCHT.
	1425 N. ROCK ISLAND AVE. PEORIA

G. ALAN SHAW
REGISTERED ARCHITECT

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER **E-4**

DRAWING NUMBER

01 19-1-2-73 BLUL
Room 1 File Cab # 1
First Floor

Harrison
First Floor
G.L. Tinsman 1-2-73

SAFETY PRODUCTS • NEW HOPE, MINNESOTA
PUBLISHED BY PATENT OFFICE

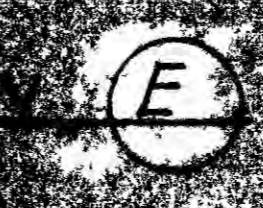
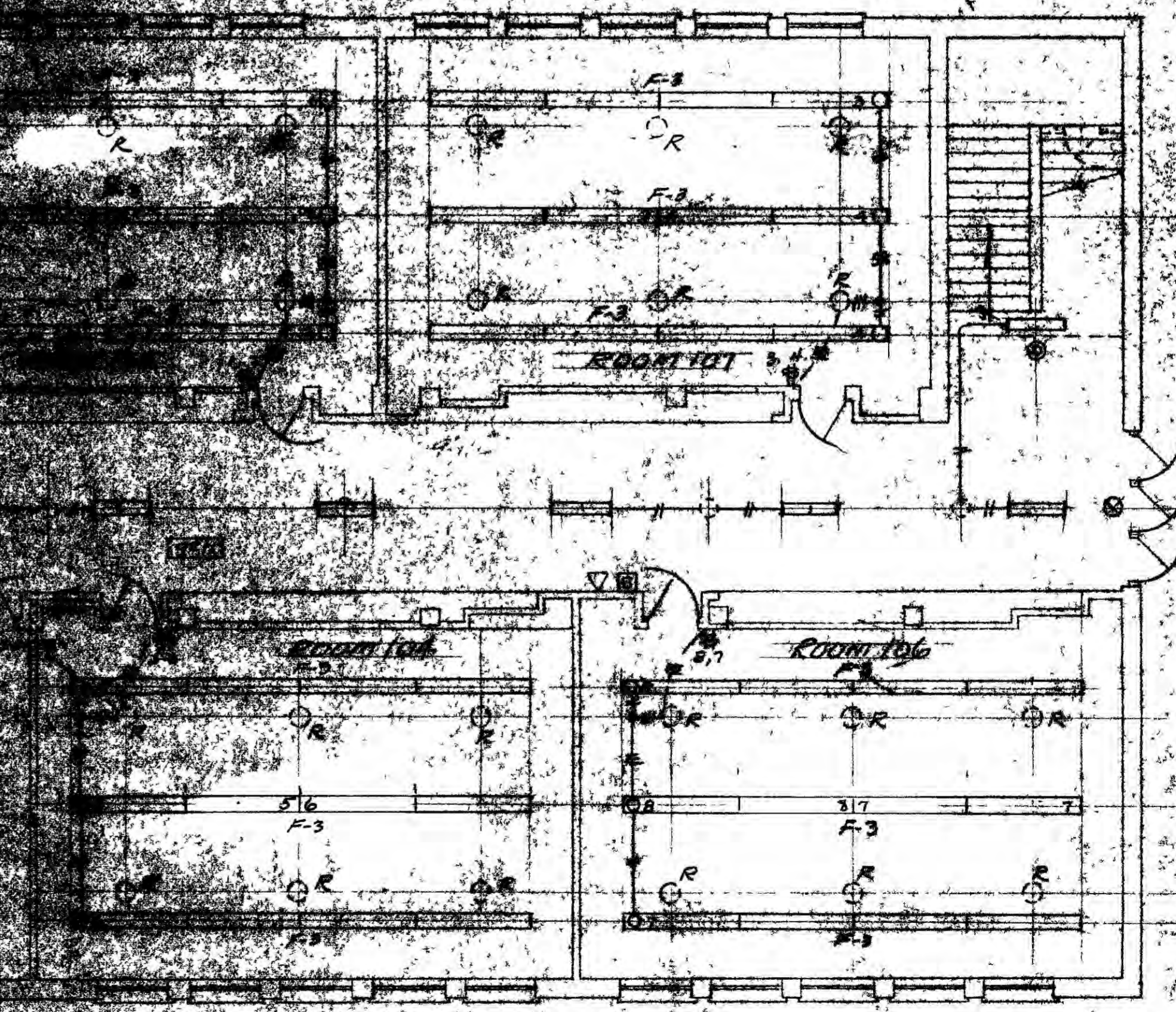
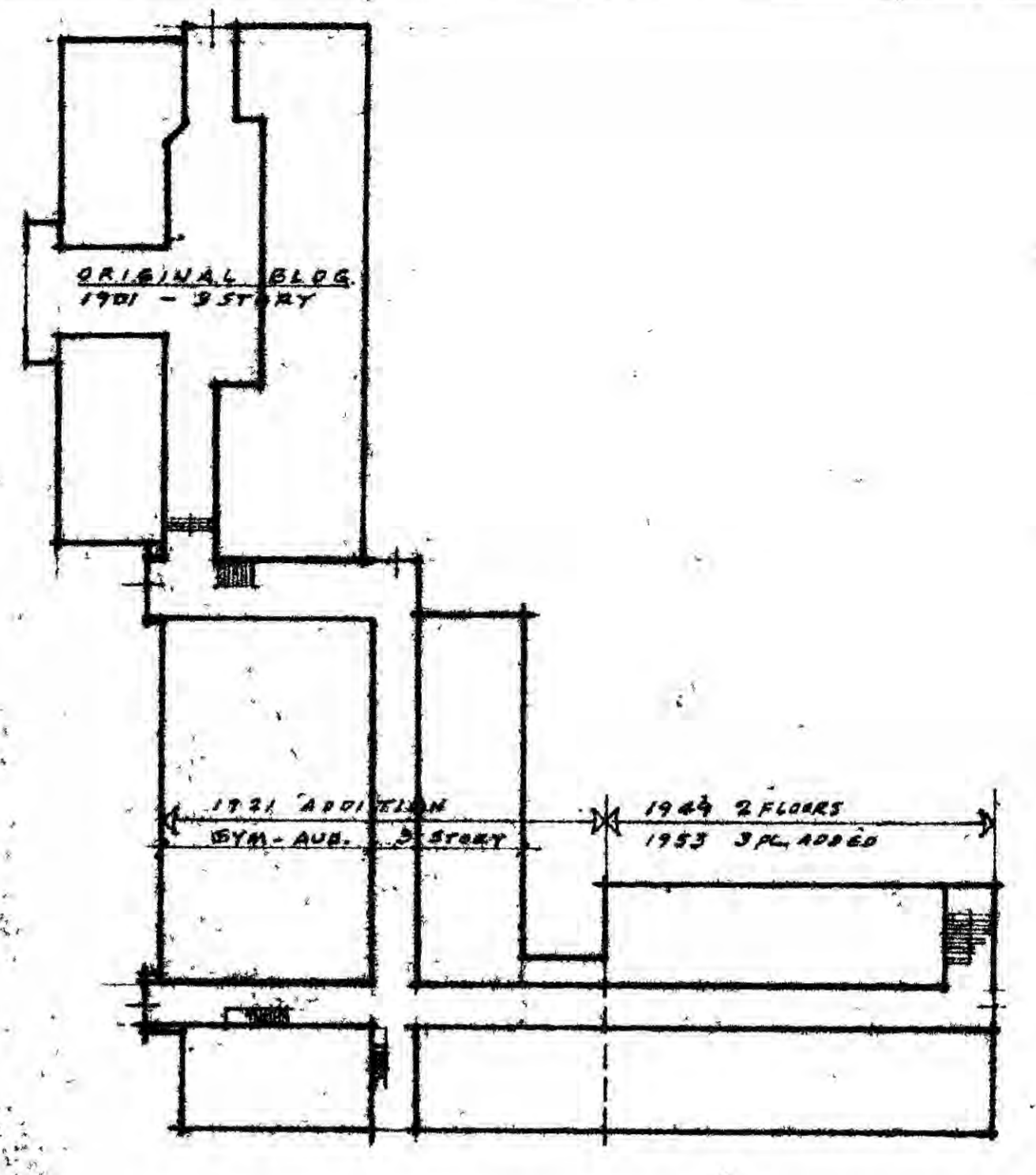
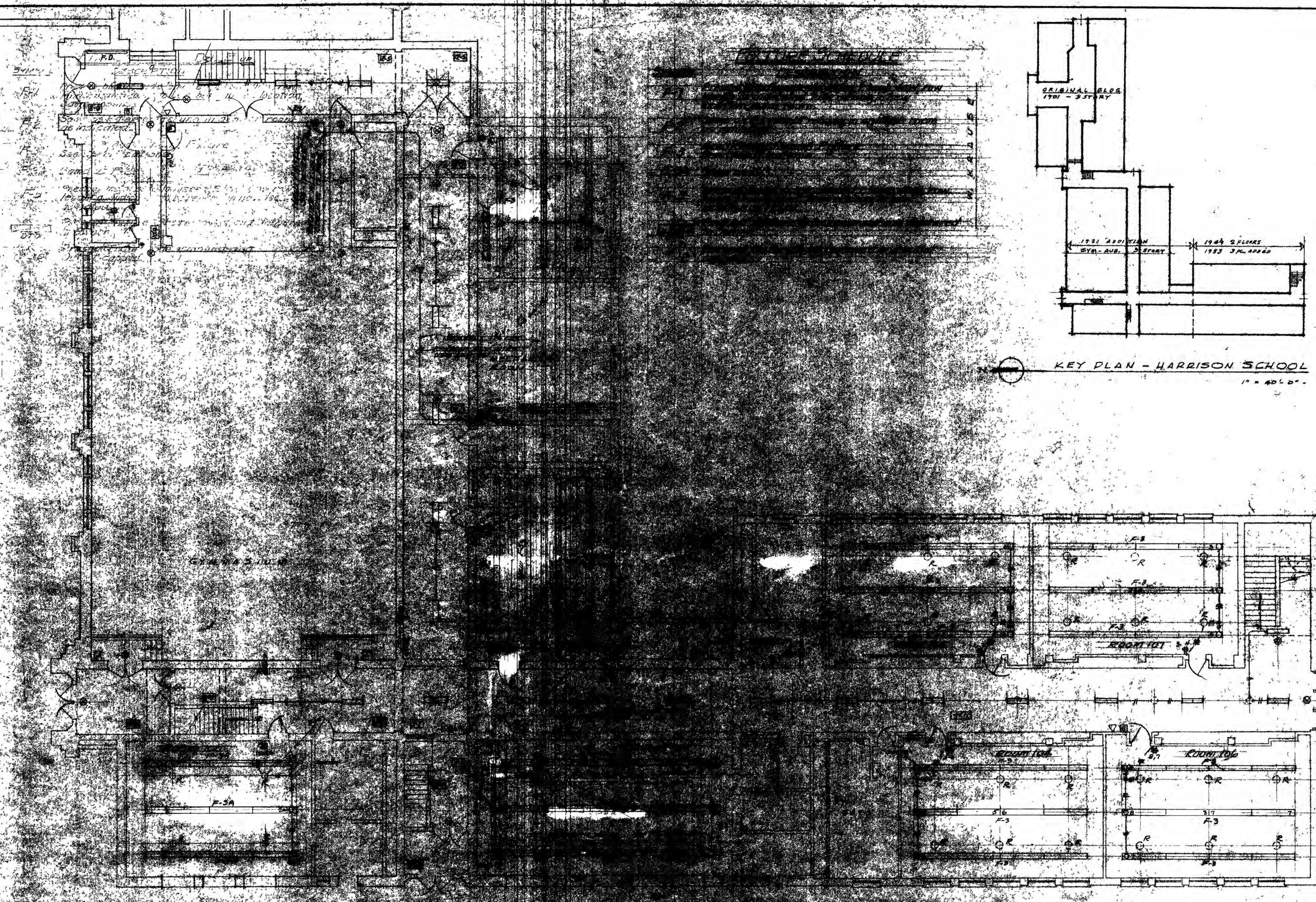
SAFETY PRODUCTS • NEW HOPE, MINNESOTA
PUBLISHED BY PATENT OFFICE

SAFETY PRODUCTS • NEW HOPE, MINNESOTA
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SAFETY PRODUCTS • NEW HOPE, MINNESOTA
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PUBLISHED BY PATENT OFFICE



GORDON L. TINSMAN
REGISTERED PROFESSIONAL ENGINEER

JOB NO. 72-11	ALTERATION TO HARRISON SCHOOL FOR PEORIA PUBLIC SCHOOLS	SHEET NO.
DATE JAN 2 1973	SCHOOL DISTRICT NO. 150 PEORIA, ILLINOIS	
	GORDON L. TINSMAN A.I.A. ARCHITECT	
	1425 N. ROCK ISLAND AVE. PEORIA, ILLINOIS	

Rev. at 4

DRAWER 4

DRAWING NUMBER

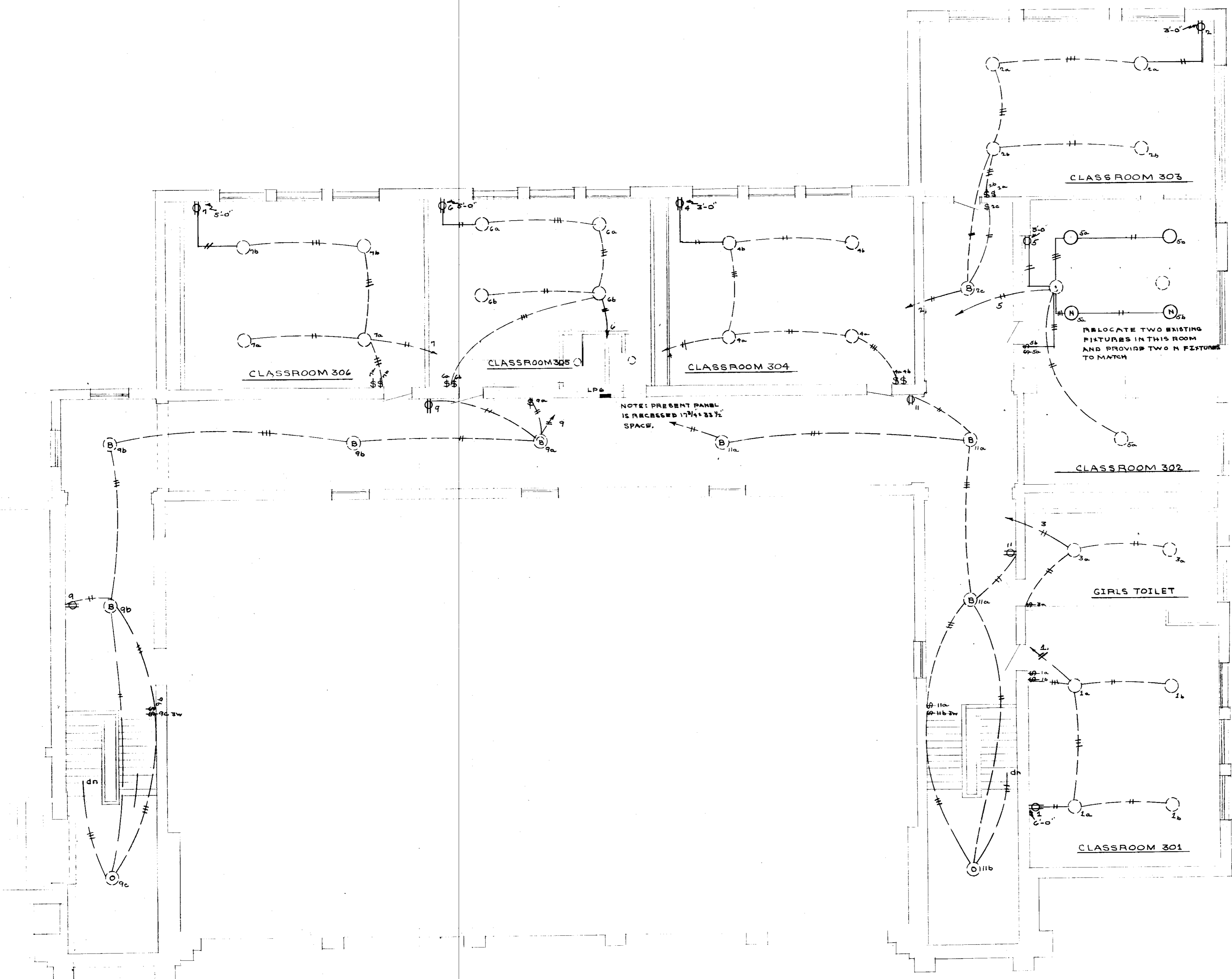
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01.19-6-1-54 BLUL
Room 1 File Cab. # 1
Third Floor Plan
SAFOD PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 0553

DRAWING NUMBER **6**
Harrison
3rd Floor Plan
Greg Briggs 6-1-54
SAFOD PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 0553

DRAWING NUMBER

SAFOD PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 0553



3RD FLOOR ELECTRICAL FLOOR PLAN SCALE 1/8" = 1'-0"

19-72
19-72

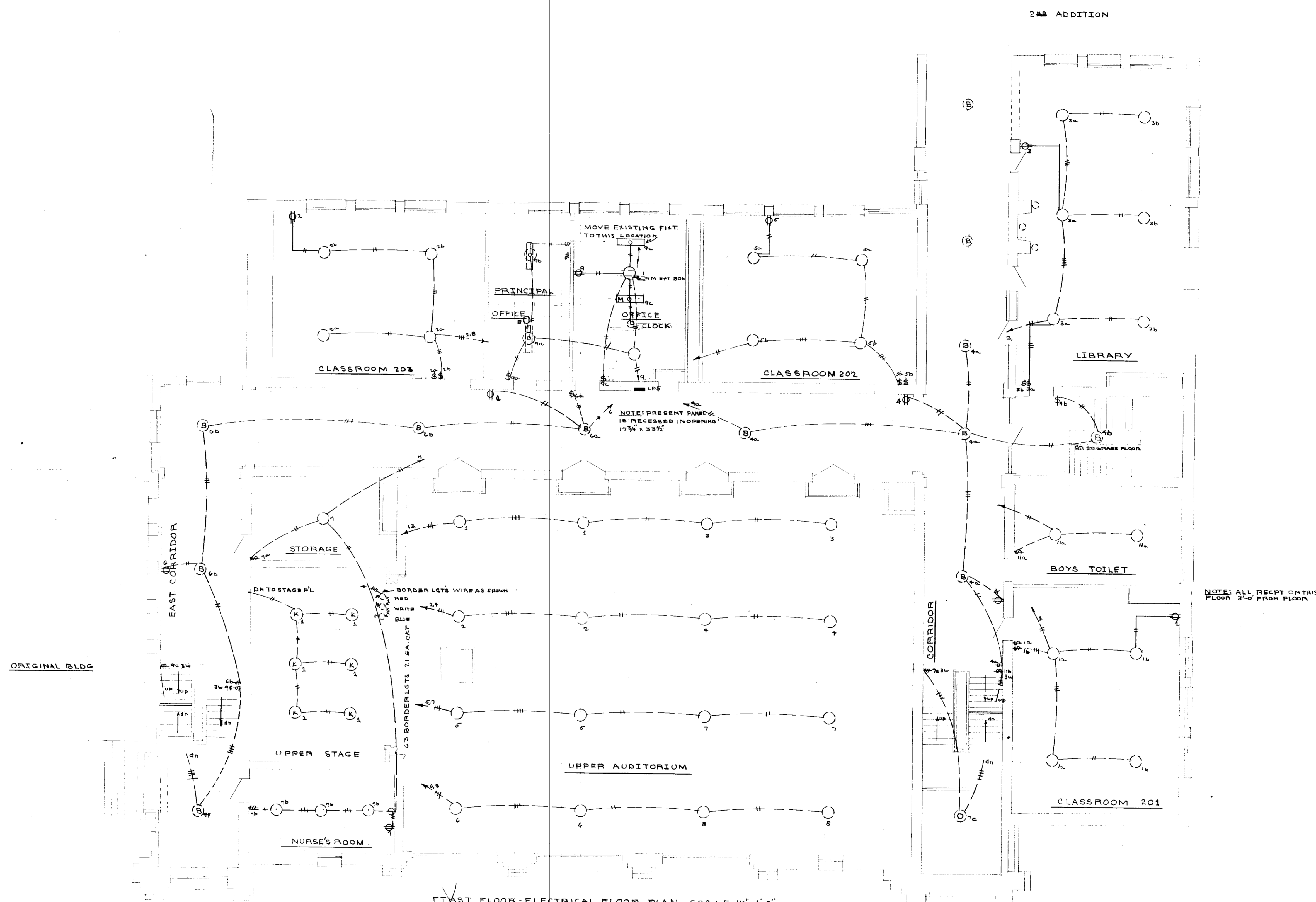
REGG - BRIGGS -

ARCHITECTS - ENGINEERS
1111 FIRST NATIONAL BANK BUILDING PEORIA, ILLINOIS
111 WEST WASHINGTON STREET CHICAGO, ILLINOIS

OPERATION NO.
2093.

HARRISON SCHOOL ELECTRICAL FLOOR PLAN REVISION
HARRISON SCHOOL REWIRING

DATE JUNE 1, 1954
SHEET
E-6



FIRST FLOOR - ELECTRICAL FLOOR PLAN - SCALE 1/8" = 1'-0"
2ND

CTOR SHALL VERIFY
L DIMENSIONS
BY CHECKED BY
llc

GREGG - BRIGGS -

ARCHITECTS - ENGINEERS

1111 FIRST NATIONAL BANK BUILDING
PEORIA, ILLINOIS

111 WEST WASHINGTON STREET
CHICAGO, ILLINOIS

OPERATION NO.

2093

HARRISON SCHOOL ELECTRICAL FLOOR PLAN 1
HARRISON SCHOOL REWIRING

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER **E4**

01.19-6-1-54 BLUL
Room 1 File Cab. # 1
Grade Floor Plan - First ADDN

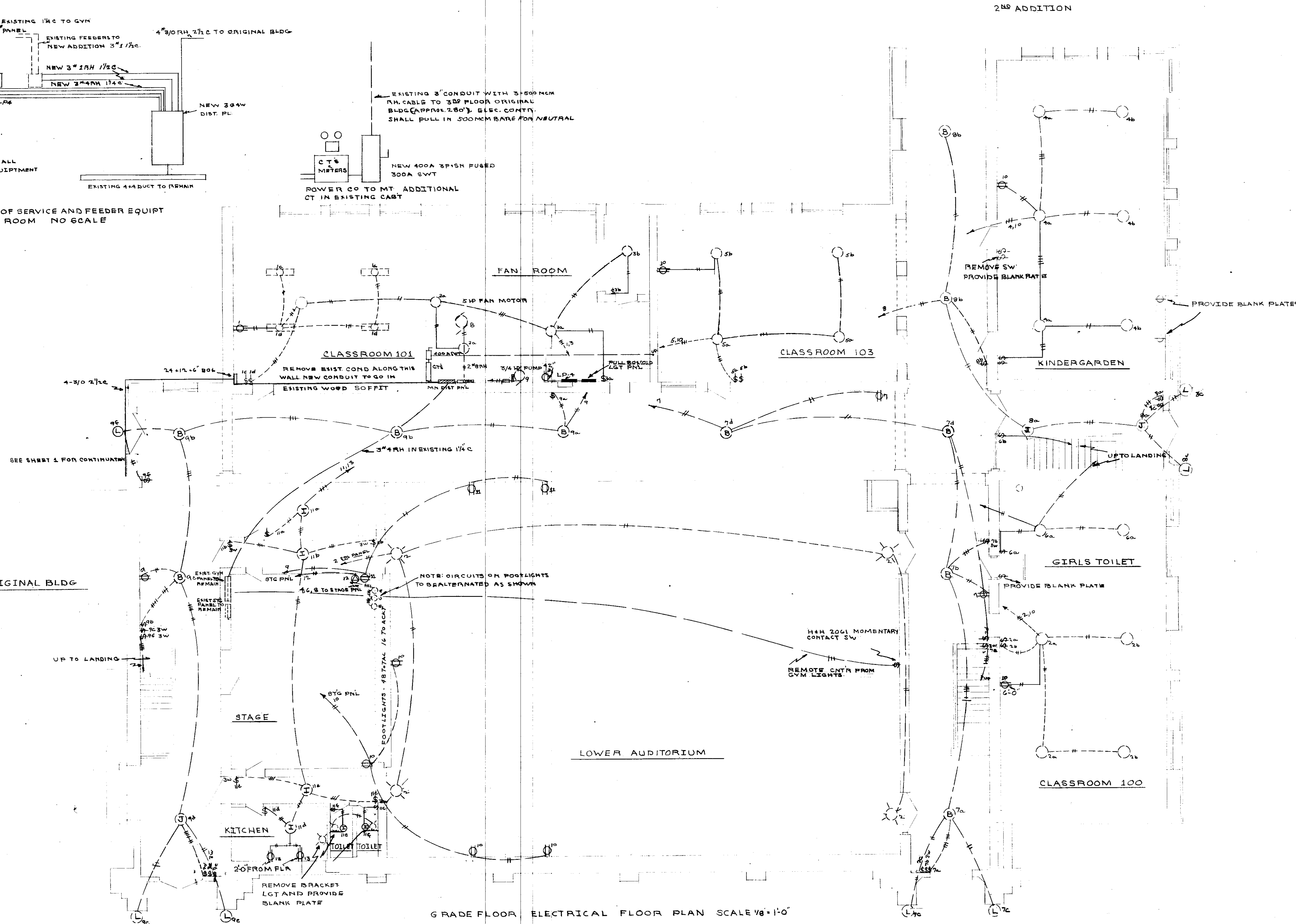
Harrison
Grade Floor Plan - 1st ADDN
Gregg-Briggs
6-1-54

SAFOD PRODUCTS • NEW HOPE, MINNESOTA
REPRODUCED BY PART NUMBER 6502
POSITION EDGE OF PRINT ON THIS LINE

SAFOD PRODUCTS • NEW HOPE, MINNESOTA
REPRODUCED BY PART NUMBER 6502
POSITION EDGE OF PRINT ON THIS LINE

SAFOD PRODUCTS • NEW HOPE, MINNESOTA
REPRODUCED BY PART NUMBER 6502
POSITION EDGE OF PRINT ON THIS LINE

SAFOD PRODUCTS • NEW HOPE, MINNESOTA
REPRODUCED BY PART NUMBER 6502
POSITION EDGE OF PRINT ON THIS LINE



GRADE FLOOR ELECTRICAL FLOOR PLAN SCALE 1/8" = 1'-0"

1ST

19-70

GREGG - BRIGGS -

ARCHITECTS - ENGINEERS
1111 FIRST NATIONAL BANK BUILDING
111 WEST WASHINGTON STREET
PEORIA, ILLINOIS
CHICAGO, ILLINOIS

OPERATION NO.
2093

HARRISON SCHOOL ELECTRICAL FLOOR PLAN 1ST ADDITION
HARRISON SCHOOL REWIRING

DATE JUNE 3, 1954
SHEET
E-4

SAFOD PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6552

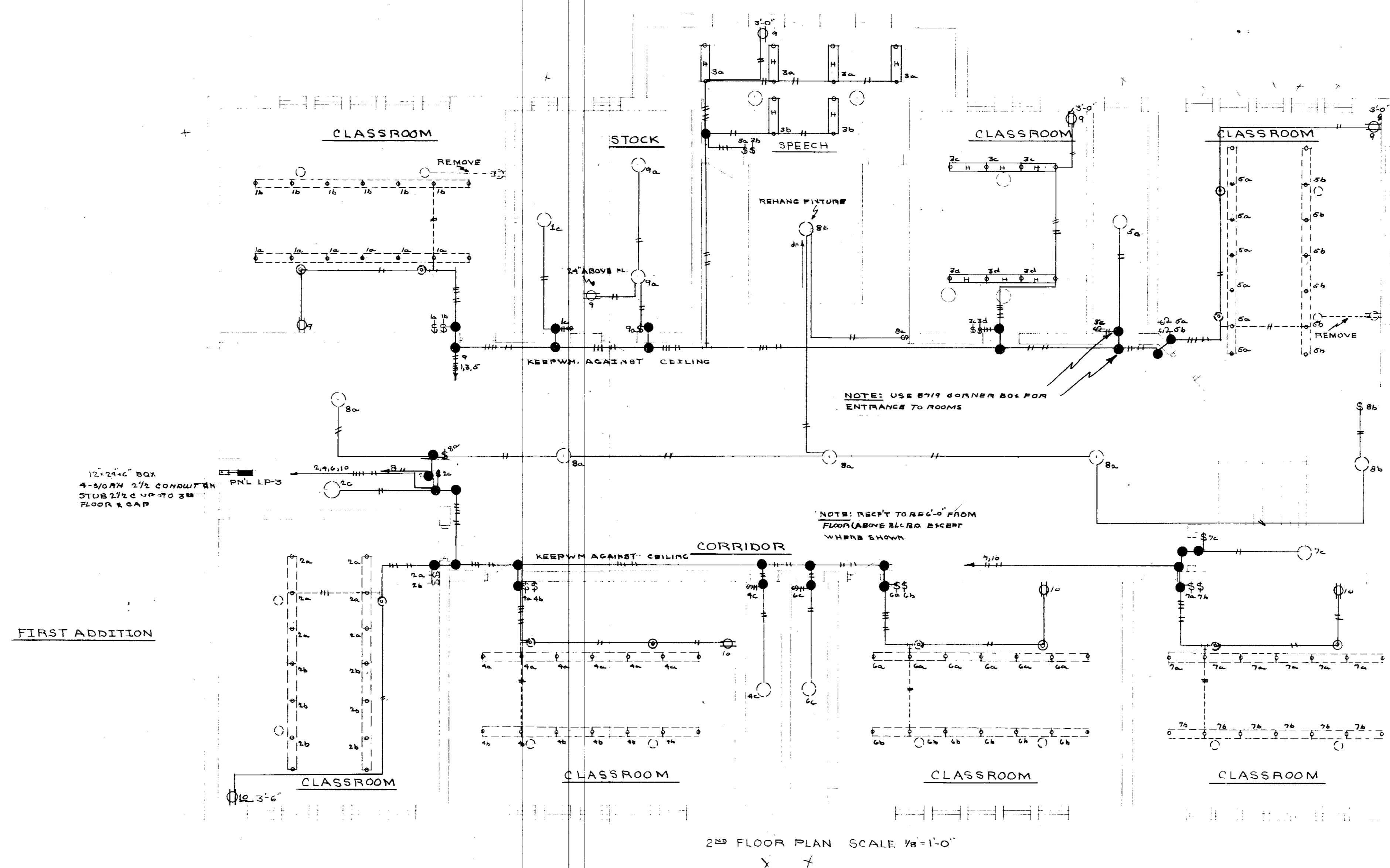
SAFOD PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

SAFOD PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6552

01.19.6-1-54 BLUL
Room 1 File Cab. # 1
Second Floor - original building
SAFOD PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6552

Harrison
2nd Floor - Original Building
Gregg-Briggs 6-7-54
SAFOD PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6552

SAFOD PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6552



CONTRACTOR SHALL VERIFY ALL DIMENSIONS
DRAWN BY [Signature] CHECKED BY [Signature]

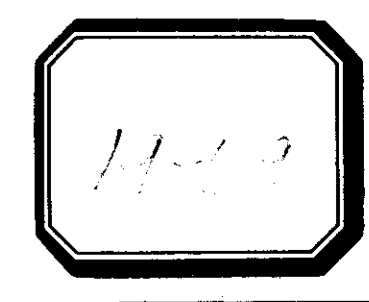
GREGG - BRIGGS -

ARCHITECTS - ENGINEERS
1111 FIRST NATIONAL BANK BUILDING PEORIA, ILLINOIS
111 WEST WASHINGTON STREET CHICAGO, ILLINOIS

OPERATION NO. 2093

HARRISON SCHOOL ELECTRICAL FLOOR PLAN ORIGINAL BLDG
HARRISON SCHOOL REWIRING

19-69



DATE JUNE 3, 1964
SHEET E-3

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

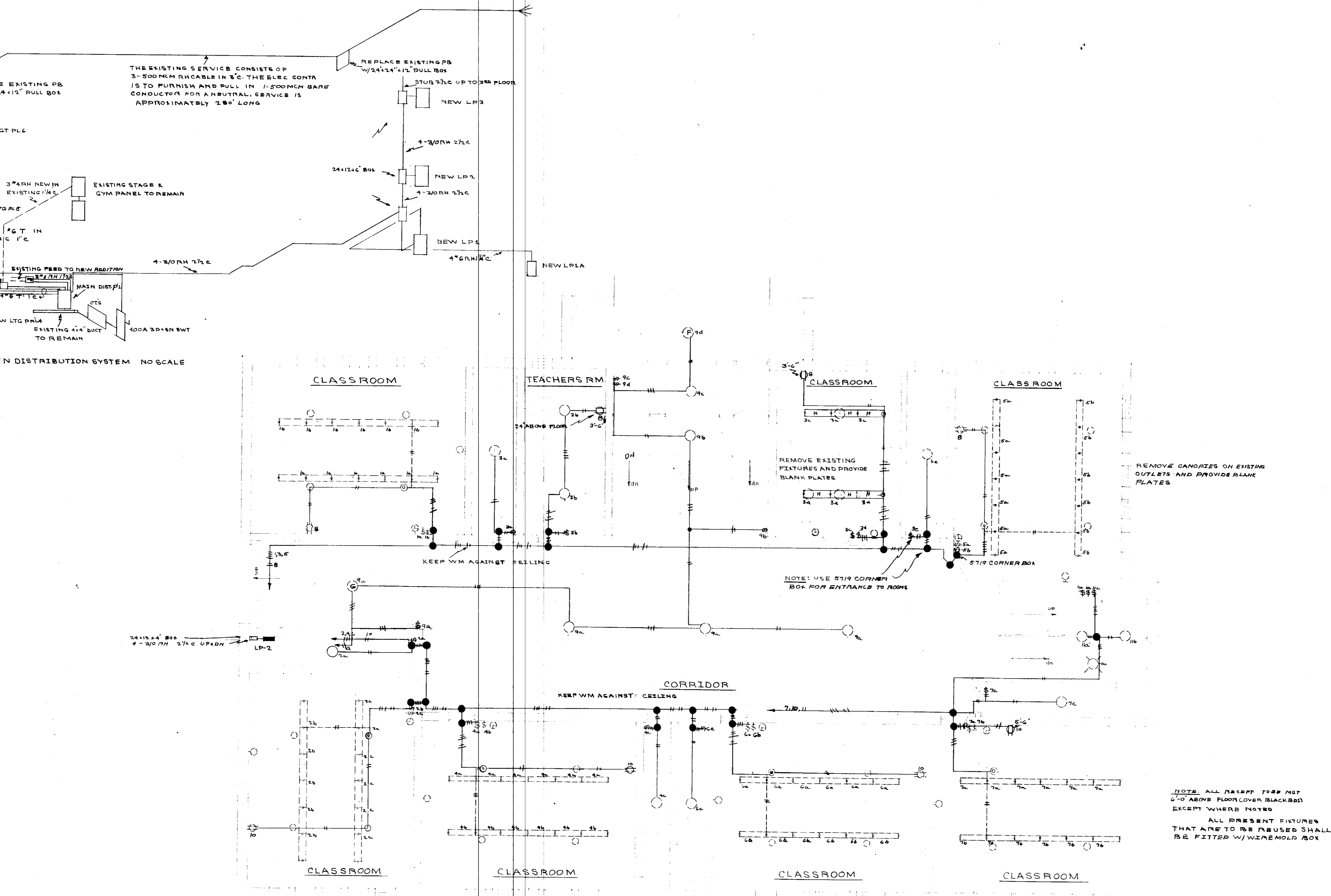
DRAWING NUMBER E-2

DRAWING NUMBER

01.19-6-1-54 BLUL
Room 1 File Cab. # 1
First Floor - original building
SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

Harrison
First Floor - Original Building
Gregg-Briggs 6-1-64
SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553



FIRST FLOOR SCALE 1/8" = 1'-0"

19-66
19-66

REGG - BRIGGS -

ARCHITECTS - ENGINEERS
1111 FIRST NATIONAL BANK BUILDING
111 WEST WASHINGTON STREET
PEORIA, ILLINOIS
CHICAGO, ILLINOIS

OPERATION NO.
2093

HARRISON SCHOOL ELECTRICAL FLOOR PLAN ORIGINAL BLDG.
HARRISON SCHOOL REWIRING

DATE: JUNE 1, 1954
SHEET
E-2

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

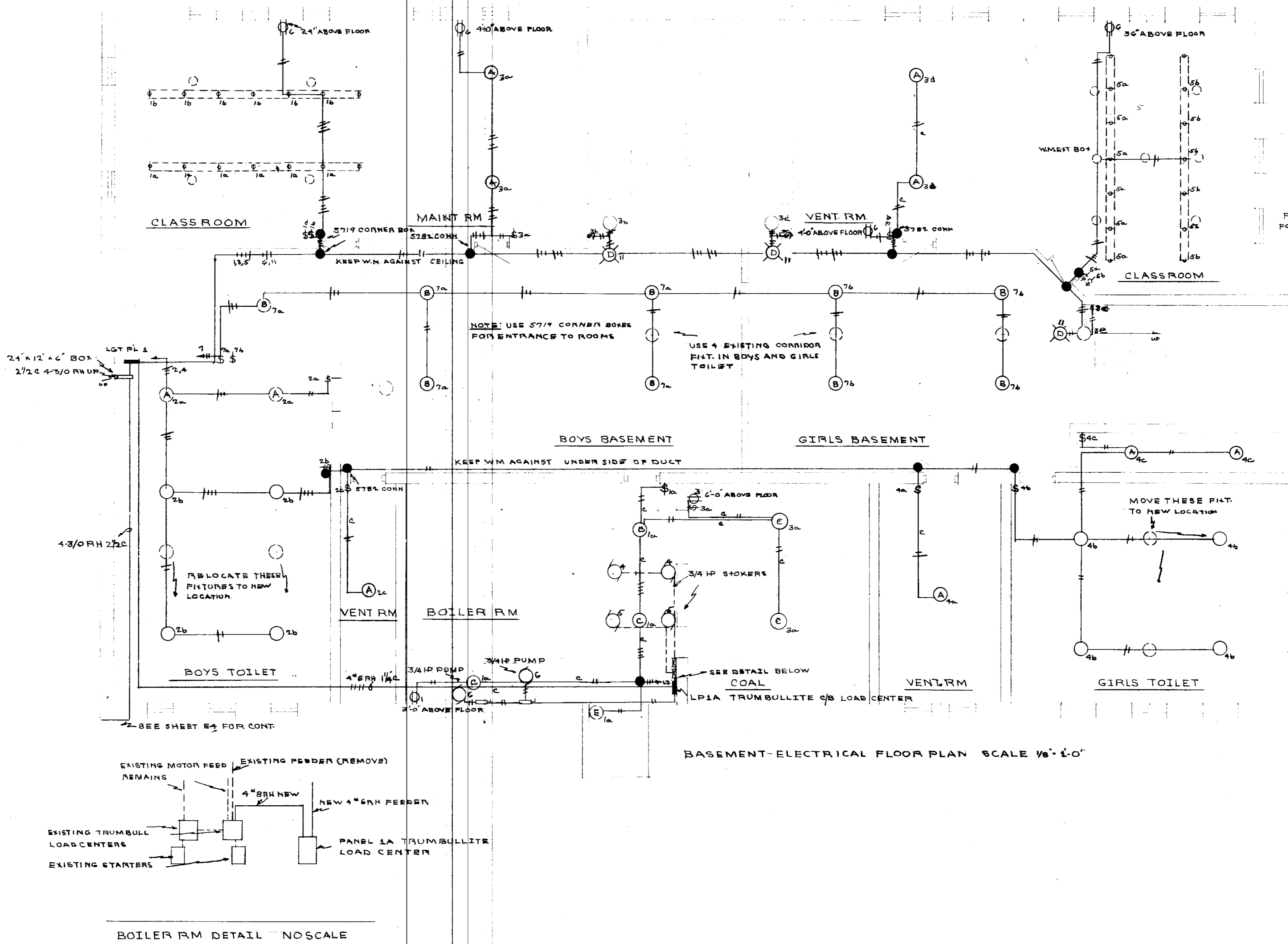
01.19-6-1-54 BLUL
Room 1 File Cab. # 1
Basement - original building
NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

01.19-6-1-54
Basement - Original Building
Gregg Briggs
NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

PANEL SCHEDULE										
CIR. NO.	NO. OF	30A	100A	200A	300A	400A	500A	600A	700A	REMARKS
1-7	7	20							70	GEN LGT RECPT
8	1									BOILER RM
9-10	2	20								SPARES
11	1									EXIT LIGHTS
1-3	3	20							70	GEN LGT RECPT
4-6	3									STOKERS - PUMPS
7-9	3									SPARES
1-11	11	20								GEN LGT RECPT
12-14	3									SPARES
1-10	10	20								GEN LGT RECPT
11-13	3									SPARES
1									70	ORIGINAL BLDG
2-4										LP 4, 5, 6
5-7										GYM PNLS LGT PNLS
8	1									NEW ADDITION
9	1	40								5 HP FAN
10-12	4	20								3 HP PUMP
13-14	2									SPARES
15-17	3								70	SPARES
1-13	13	20								GEN LGT RECPT
14-16	3									SPARES
1-11	11	20								GEN RECPTS
12-14	3									SPARES
1-11	11	20								GEN LGT RECPT
12-14	3									SPARES

SYMBOL LIST
 EXISTING CEILING OUTLET
 NEW CEILING OUTLET
 JUNCTION BOX
 EXIT LIGHT
 EXISTING WM EXTENSION BOX
 EXISTING DUPLEX RECPT. PROVIDE SS PLATE
 DUPLEX RECPT H*H 19/3 SS PLATE
 SINGLE POLE SWITCH H*H 159/1 W/SS PLATE
 3WAYSWT H*H 159/3 W/SS PLATE
 CONDUIT OR WM EXPOSED (NEW)
 " " " " EXISTING
 CONDUIT CONCEALED (EXISTING)

MOTOR
 MAGNETIC STARTER
 COMB. STARTER
 LGT PNL
 DIST. PANEL
 DISCONNECT



PROVIDE BLANK PLATES FOR EXISTING OUTLETS

- FIXTURE LIST**
- A BRYANT KEYLESS RECPT.
 - B MILLER NM 1504 CEILING W/ DIAMOND 5" 202.8" 14 G 200W
 - C BENJAMIN RLM DOME RECEPT HOOD #7644 3'-0" STEMS
 - D DAYBRITE # 3/26 SINGLE EXIT SIGN 2-40W LAM
 - E CROUSE-HINDS FORM 200 AND GUARD 150W
 - F MILLER NM 1555 SWIVEL W/TROJAN 52.64" 14 GE
 - G TO MATCH EXISTING FLOOR CORRIDOR OFF
 - H TO MATCH EXISTING FIXTURES.
 - I FIXTURE TAKEN FROM CL BLDG
 - J MILLER NM 1504 CEILING W/ VENUS 5" 807" 14 GE
 - K BENJ 7201 GLASS TEE HOOD 2'-0" STEMS 200W
 - L HOLOPHANE #415 OUTLET
 - M MATCH EXISTING OFF CLAS
 - N MILLER NM 1555 CHAIN
 - O DIAMOND 5" 202.8" 14 GE

BASMENT-ELECTRICAL FLOOR PLAN SCALE 1/8" = 1'-0"

BOILER RM DETAIL NOSCALE

HARRISON SCHOOL-ELECTRICAL FLOOR PLAN ORIGINAL

ARCHITECT-SHALL VERIFY ALL DIMENSIONS
CHECKED BY

GREGG - BRIGGS -

ARCHITECTS - ENGINEERS
1111 FIRST NATIONAL BANK BUILDING
111 WEST WASHINGTON STREET
PEORIA, ILLINOIS
CHICAGO, ILLINOIS

OPERATION NO. HARRISON SCHOOL REWIRING
2093

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER 5

DRAWING NUMBER

SAFECO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 8553
FOR INFORMATION SEE DRAWING 8553

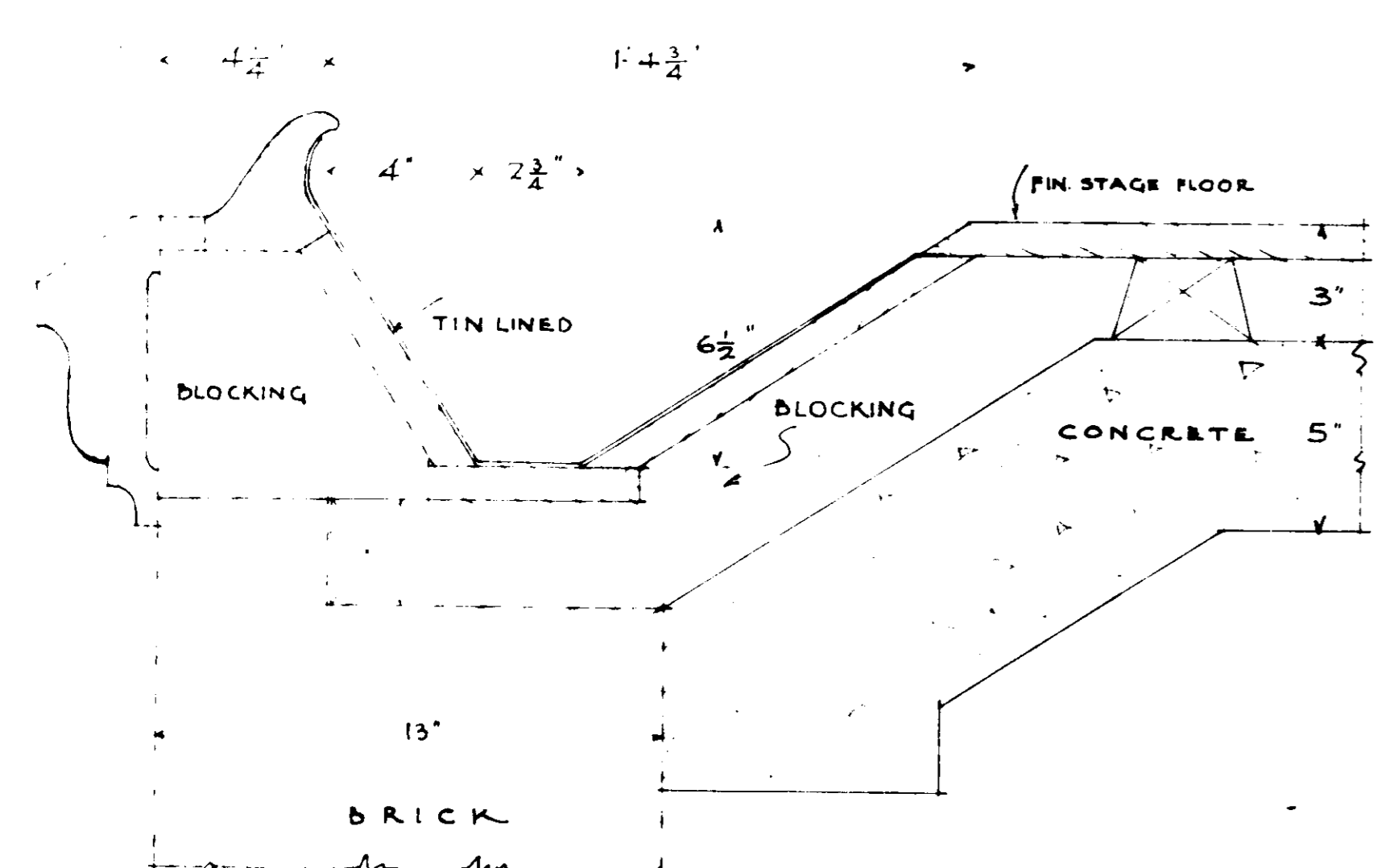
SAFECO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 8553
FOR INFORMATION SEE DRAWING 8553

SAFECO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 8553
FOR INFORMATION SEE DRAWING 8553

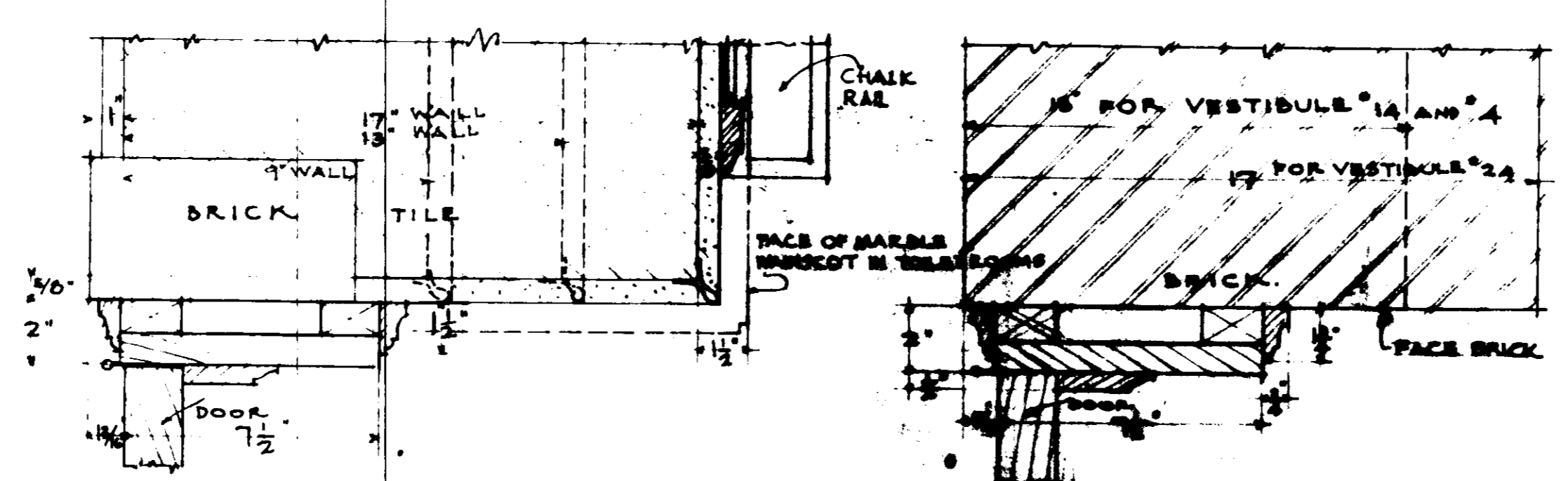
01-19-8-20-21 BLUL
Room 1 File Cab. # 1
Roof Plans
SAFECO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 8553
FOR INFORMATION SEE DRAWING 8553

Harrison
Roof Plan
Hewitt + Emershon 8-20-21
SAFECO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 8553
FOR INFORMATION SEE DRAWING 8553

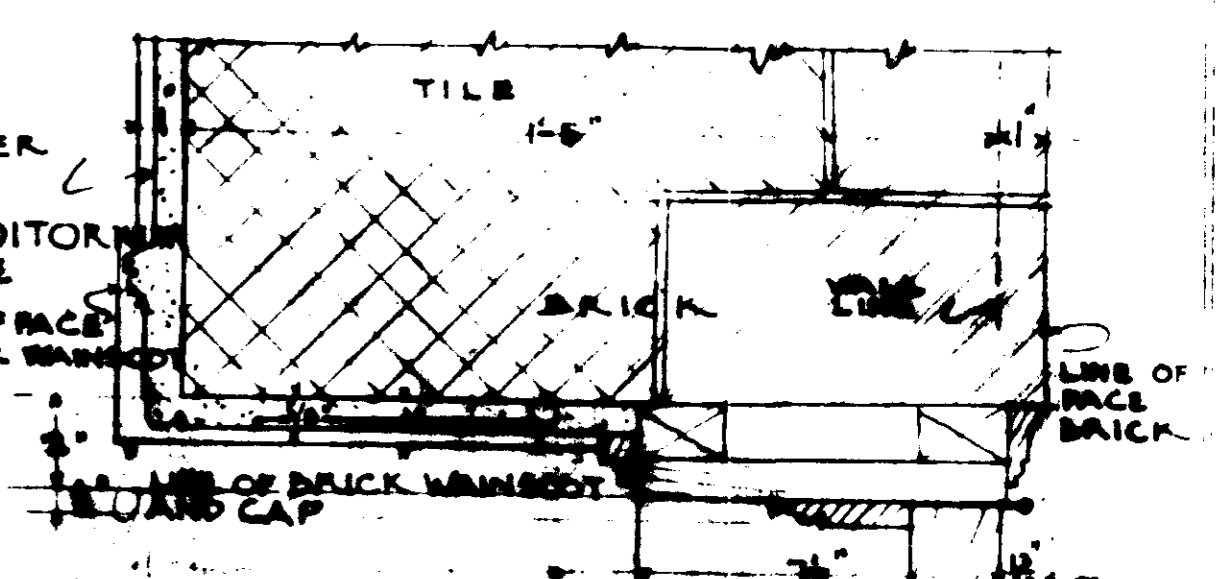
SAFECO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 8553
FOR INFORMATION SEE DRAWING 8553



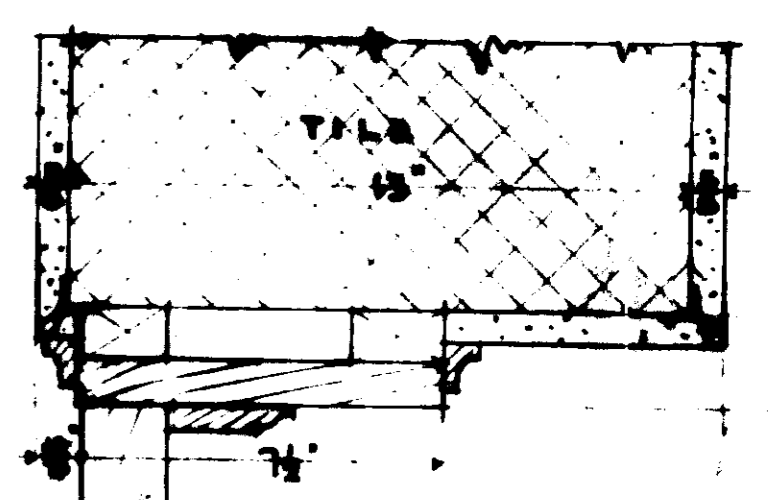
SECTION THRU FOOTLIGHT TROUGH
SCALE 3/4" = 1 FOOT



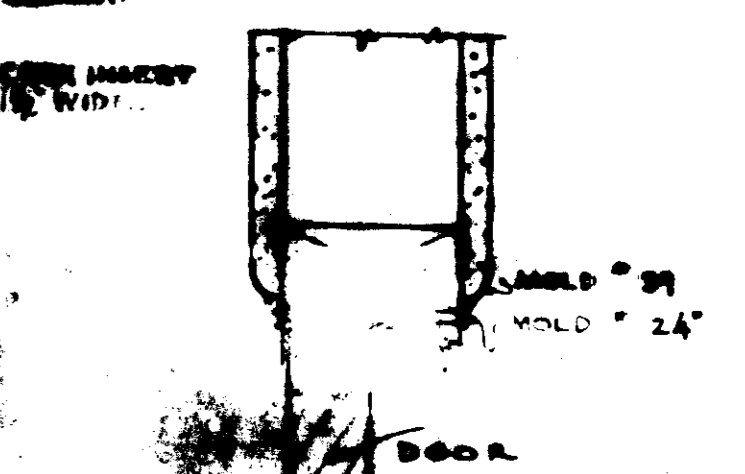
TYPICAL JAMB FOR CORRIDOR DOORS
JAMB FOR INNER VESTIBULE DOORS
FOR WALL THICKNESS SEE FLOOR PLANS
SCALE 3/4" = 1 FOOT



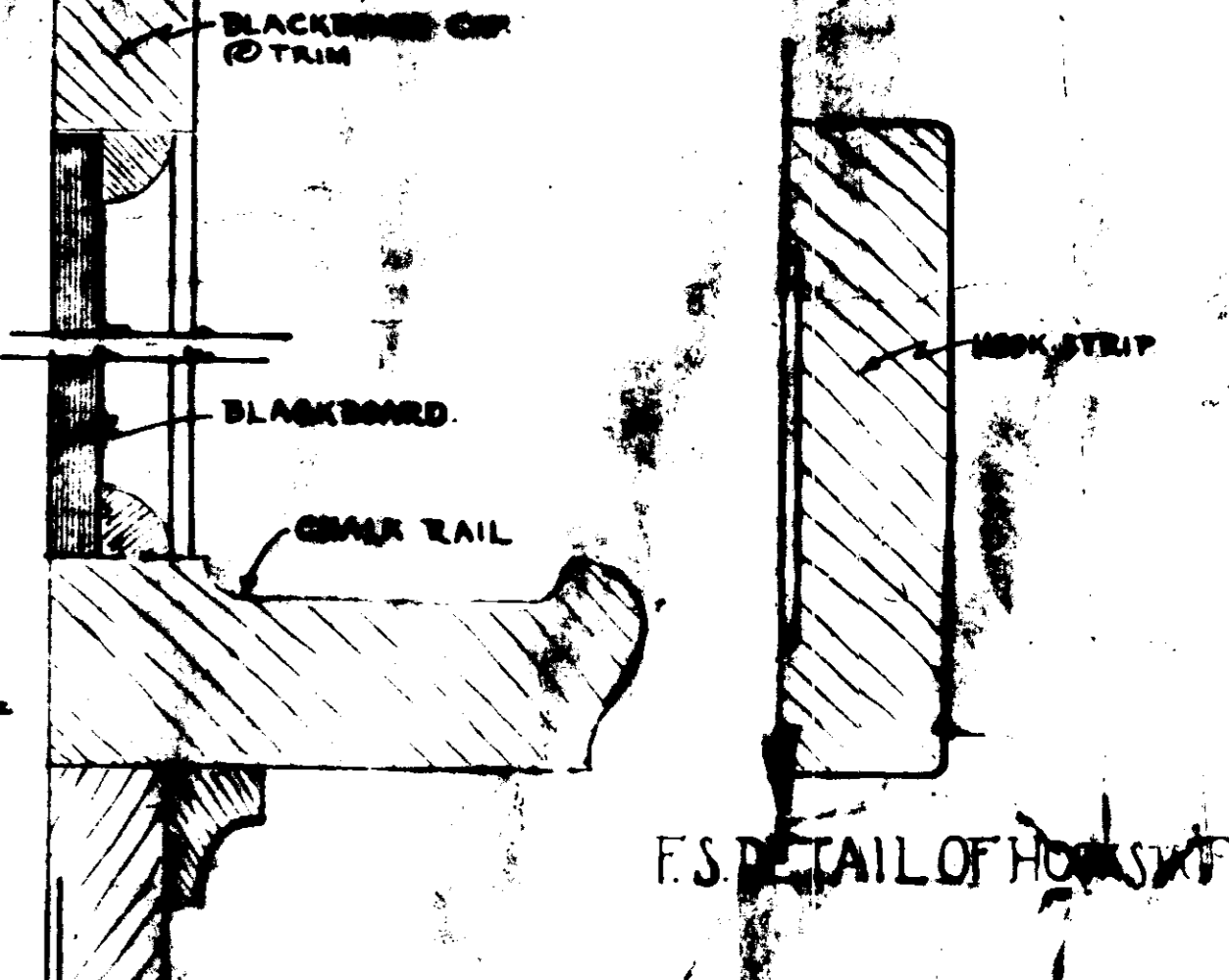
JAMB FOR MAIN ENTRANCE DOORS TO AUDITORIUM
SCALE 3/4" = 1 FOOT



JAMB FOR DOORS IN TILE WALL
PLASTERED ON BOTH SIDES
SCALE 3/4" = 1 FOOT

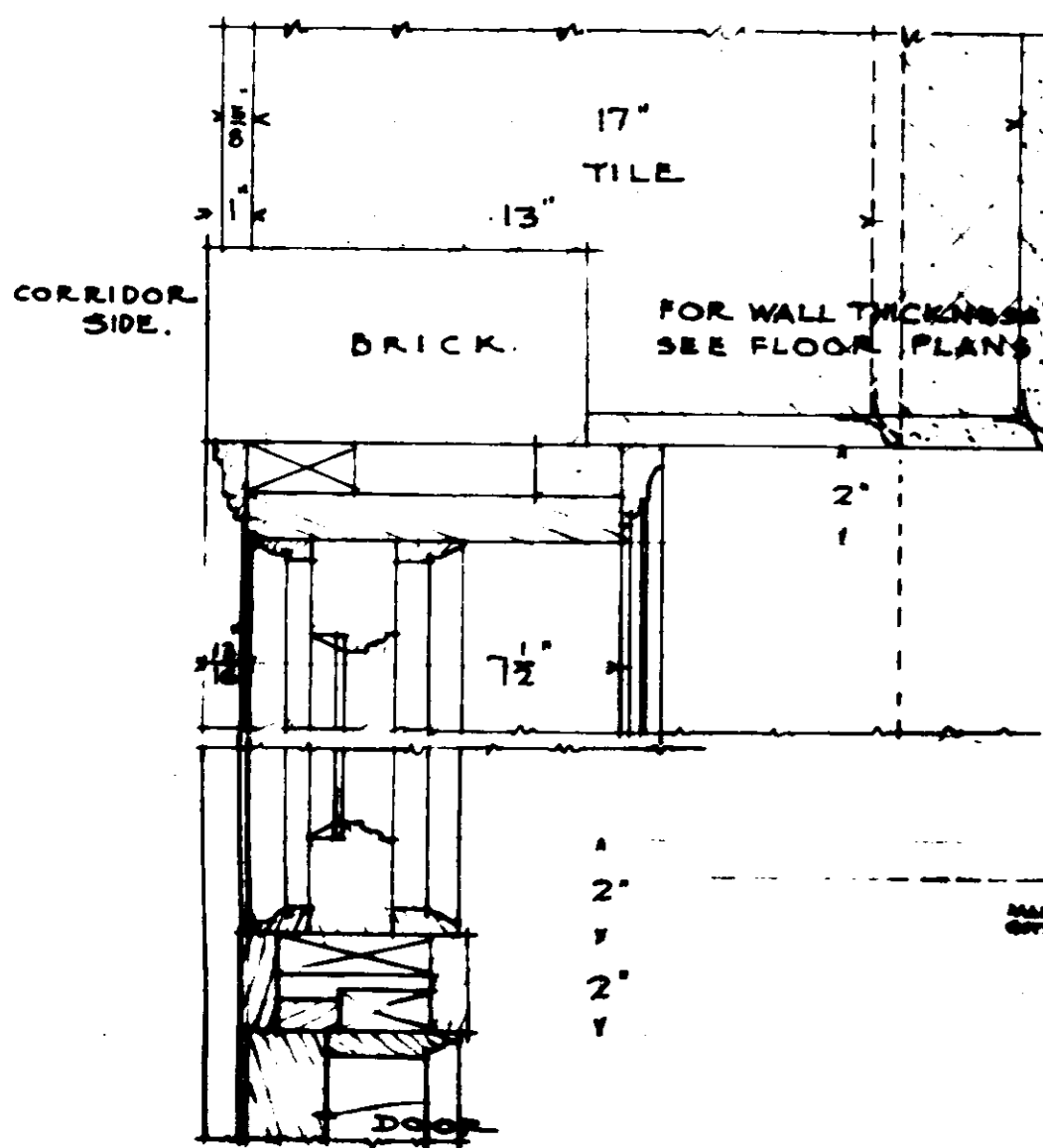


DOOR JAMB FOR PLASTER PARTITIONS
SCALE OF DETAILS 3/8" = 1 FT.

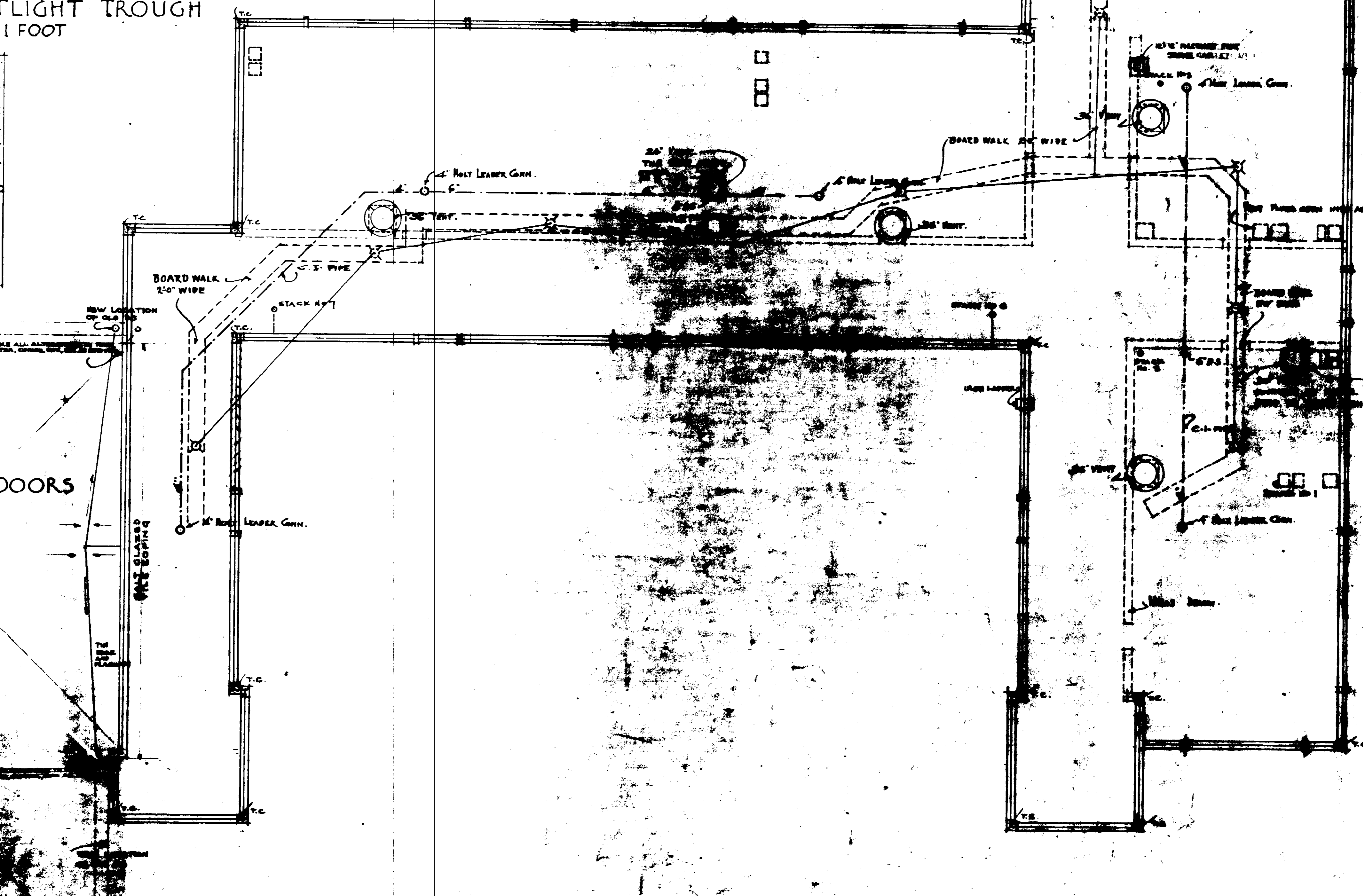


F.S. DETAIL OF HOOK STRIP
SCALE OF DETAILS 3/8" = 1 FT.

F.S. DETAIL OF CORNICE WITH P.
BLACKBOARD CAP & CHALK RAIL
SCALE OF DETAILS 3/8" = 1 FT.



SECTION THRU HEAD & TRANSOM FOR TYPICAL
CORRIDOR CLASS ROOM DOORS
SCALE 3/4" = 1 FOOT



MAIN ROOF PLAN
SCALE 3/8" = 1 FT.

ADDITION AND ALTERATIONS FOR THE HARRISON SCHOOL - PEORIA, ILL.			
OP. NO.	DRAWN BY	CHECKED BY	SHEET
949	HEWITT + EMERSON	ARCHITECTS	5

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

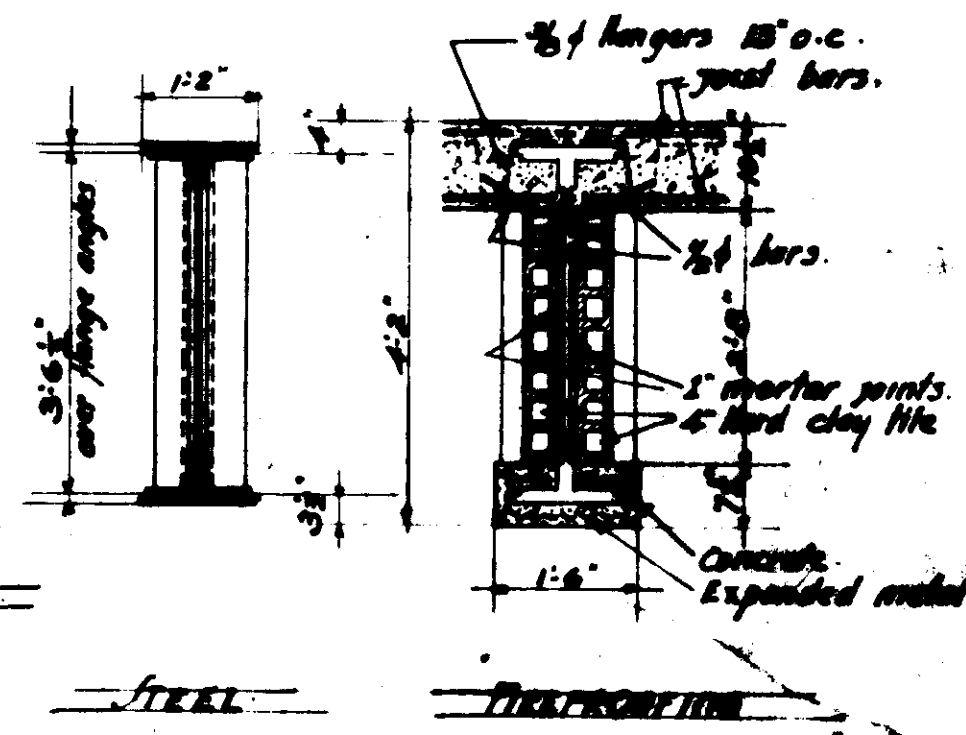
01.19-8-20-21 BLUL
Room 1 File Cab. # 1
Details

Harrison
Details
Hewitt-Emerson 8-20-21

Total length of cover plates 35'-0" per #1
17'-6" per #1

(A) 5'-0" x 5'-0" filled top of column with 7-#8 #11's

(B) 5'-0" x 5'-0" with 5-#8 #11's



1" plate

Concrete block 1-2-4 mix

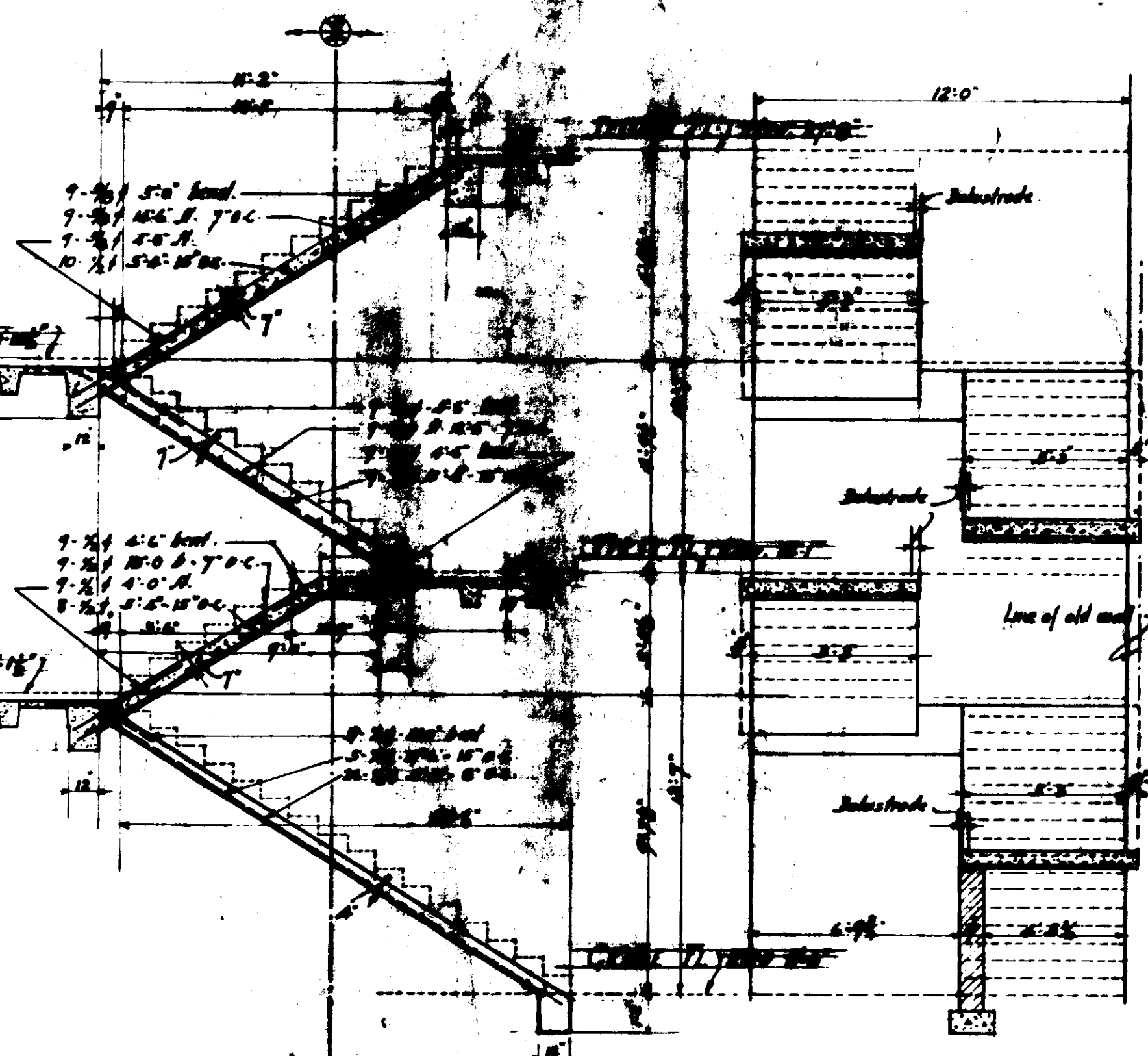
Total clear span 56'-0"
Total overall length 58'-0"

HALF SIDE ELEVATION

SECTIONS

DETAIL OF AUDITORIUM ROOF PLATE GIRDERS

Scale 1/8 inch to one foot



LONGITUDINAL SECTION

CROSS SECTION AT X

DETAIL OF STAIRS NO. 1 AND NO. 2

Scale 1/4 inch to one foot



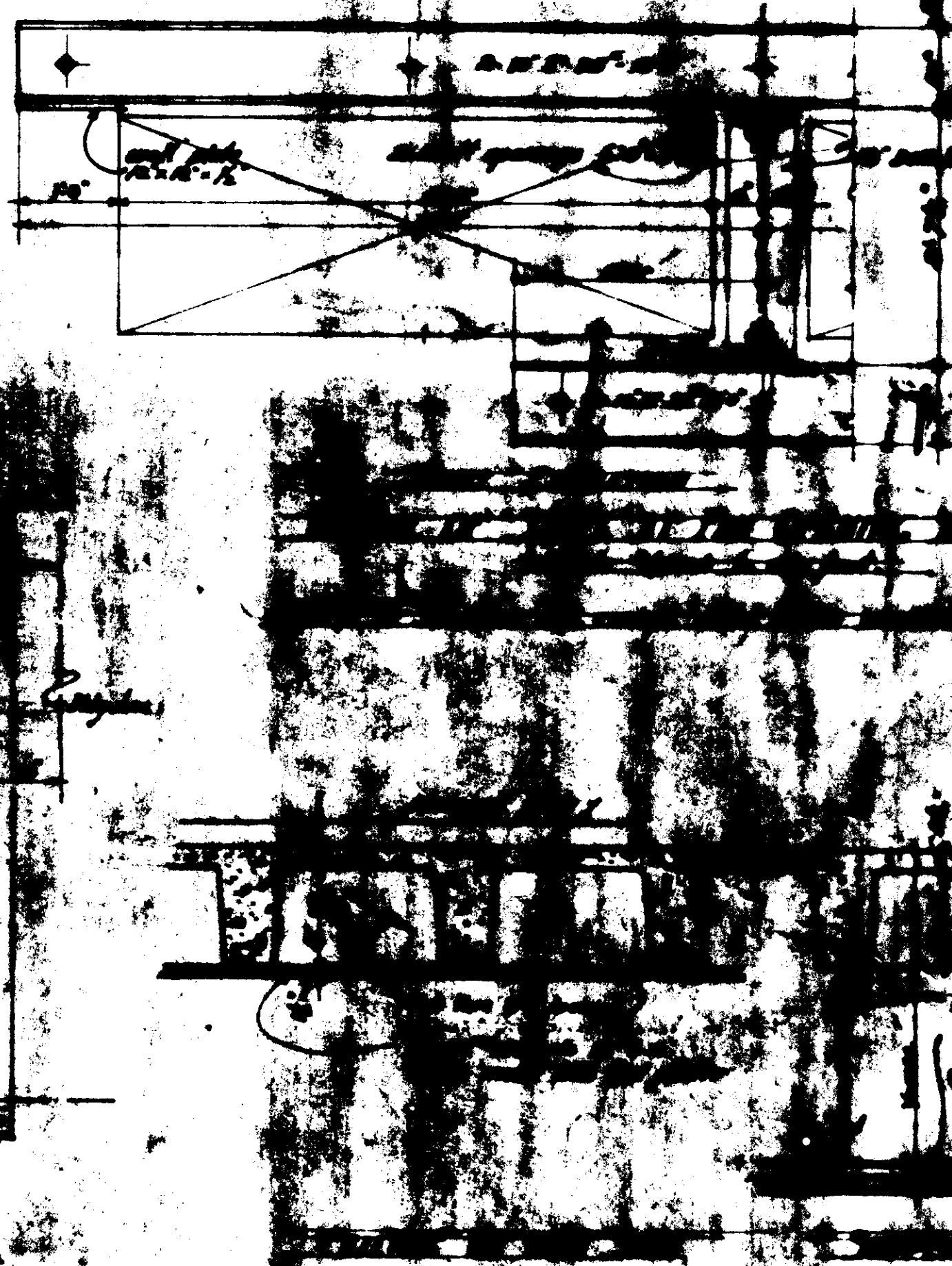
DETAIL STAIRS NO. 3

Scale 1/4 inch to one foot



DETAIL OF STEEL COLUMN IN SECOND STORY

Scale 1/4 inch to one foot



ADDITION AND
HARRISON SCH
949 HEWITT
ASBRIA L

SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

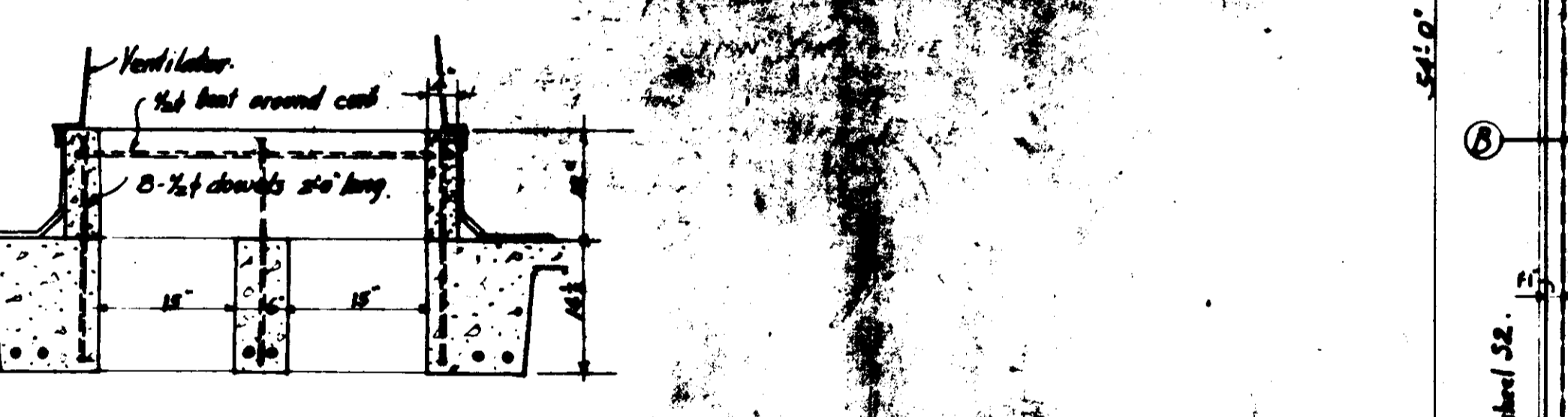
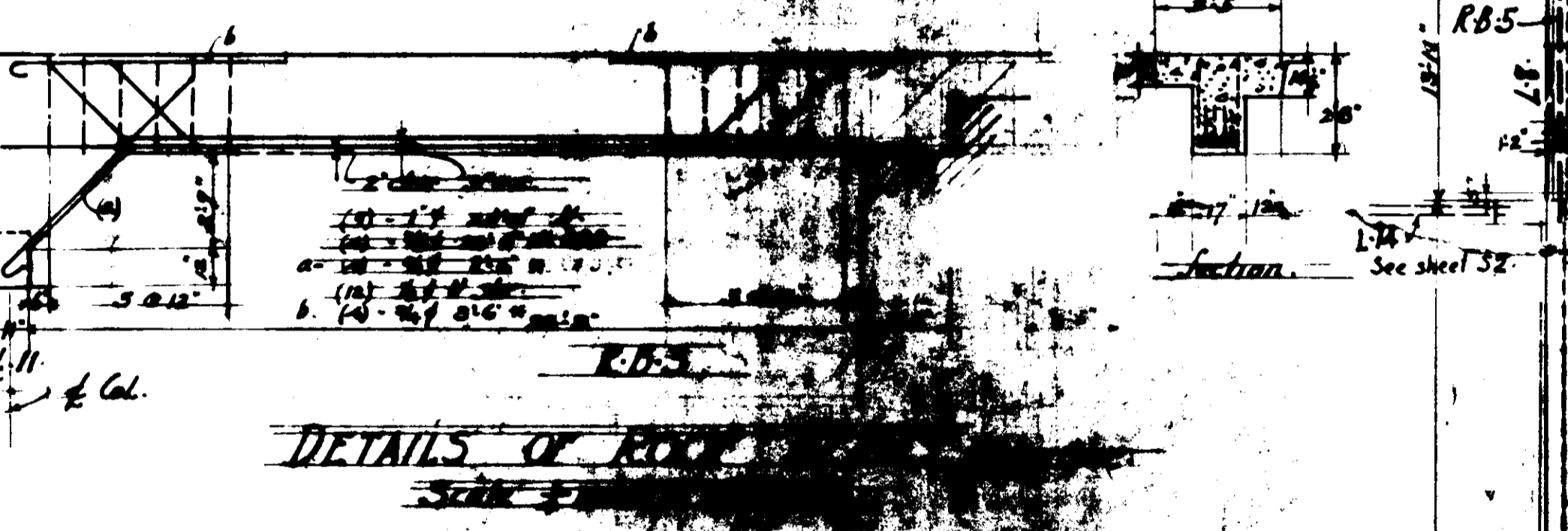
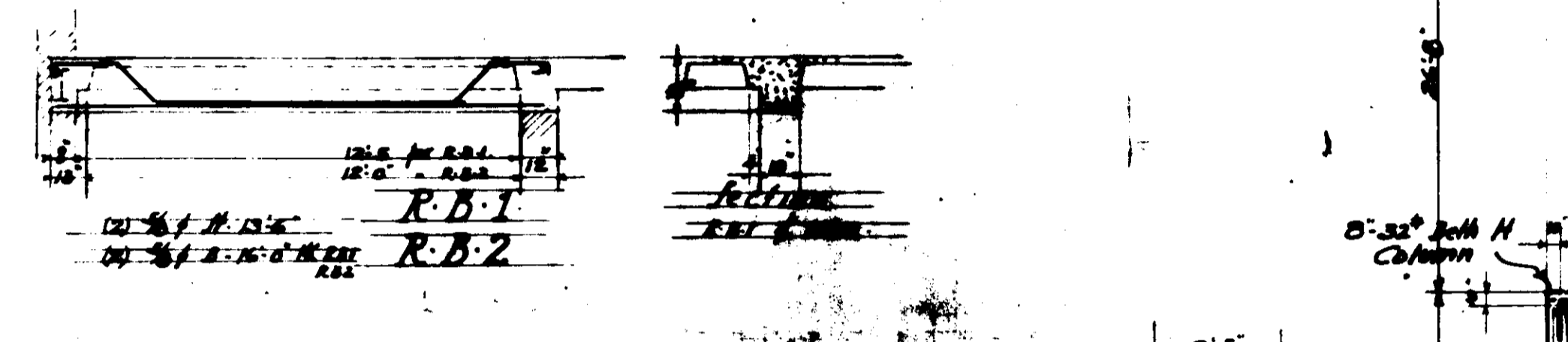
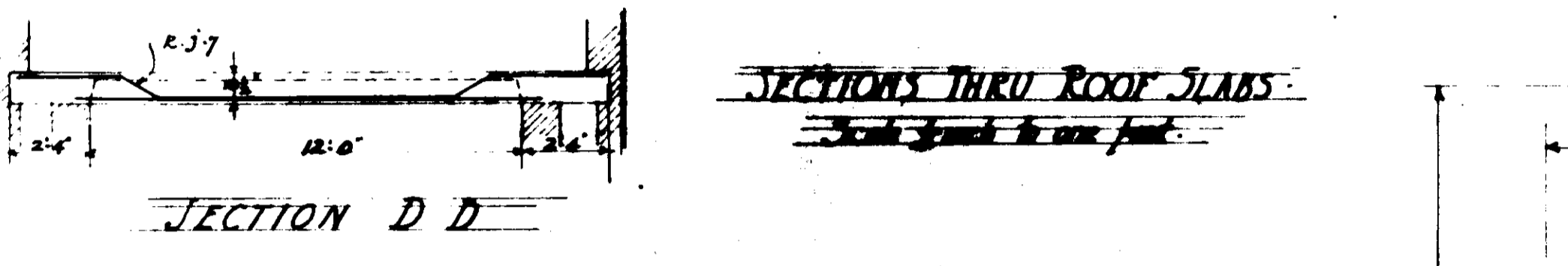
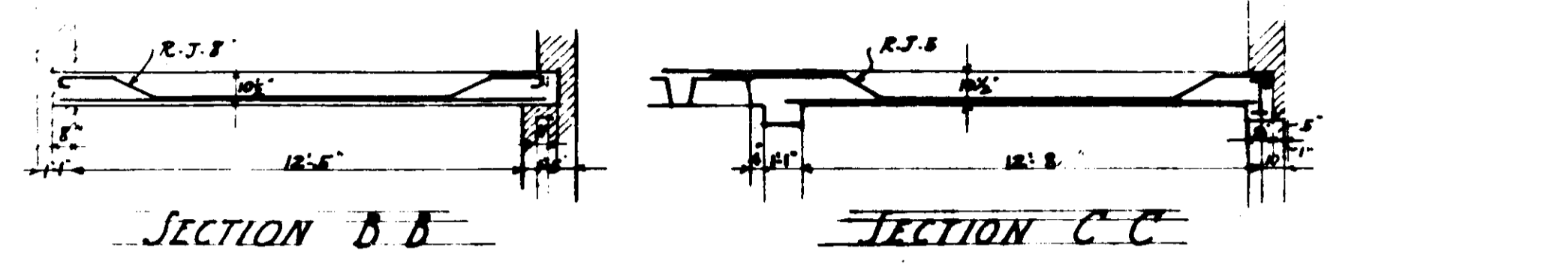
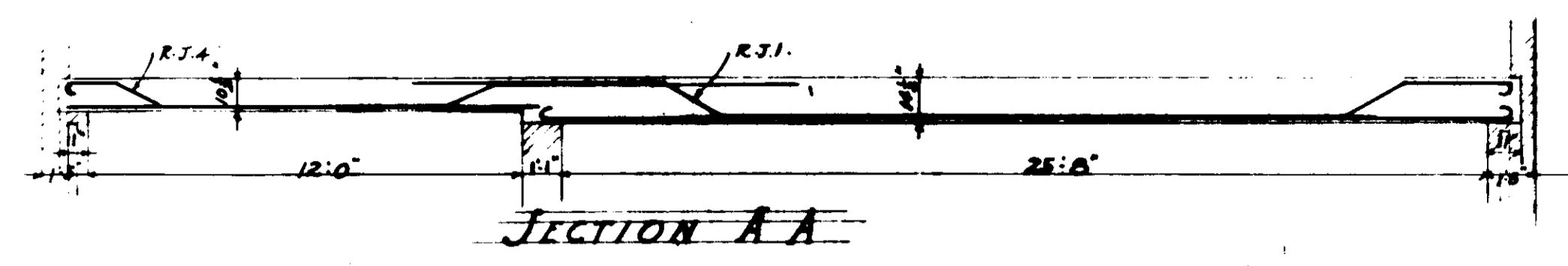
SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

0119-8-20-21 BLUL
Room 1 File Cab #1
Main Roof Framing
SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

DRAWING NUMBER **S3**
Harrison
Main Roof Framing
Hewitt-Emerson 8-20-21
SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

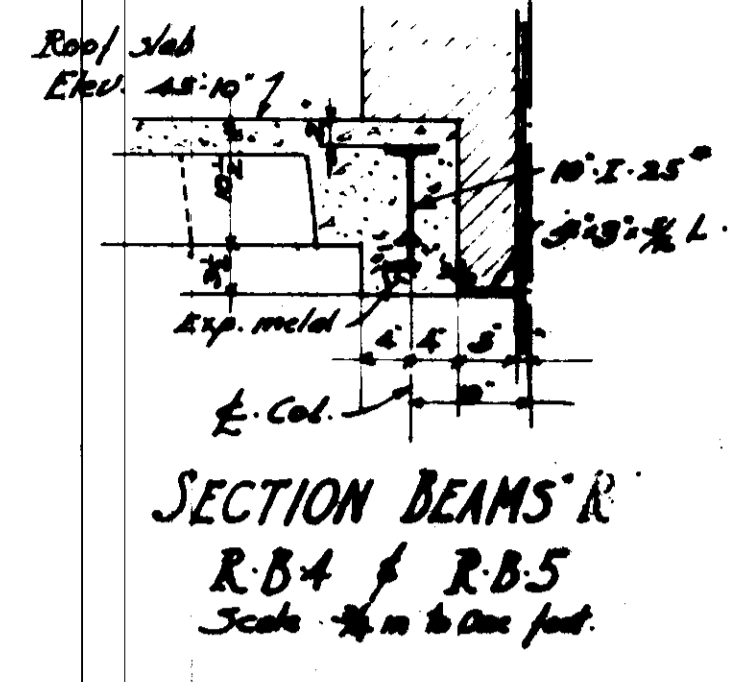
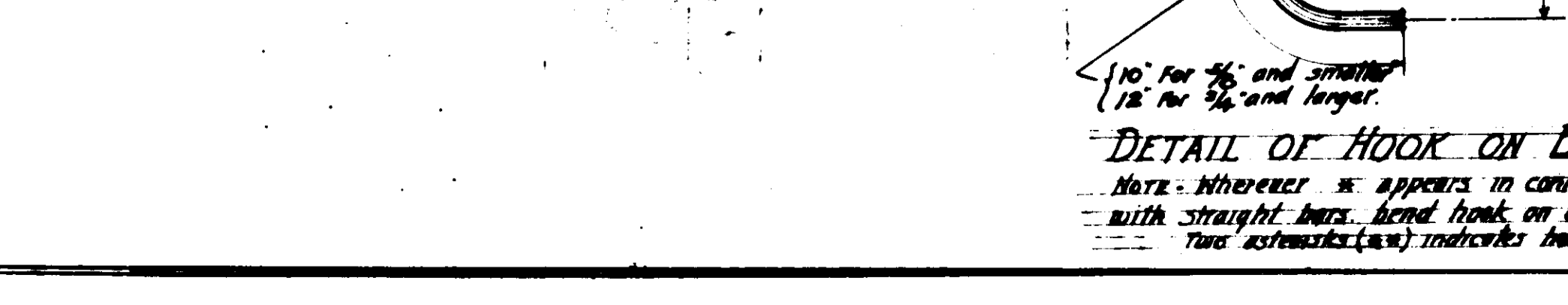
SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553



DETAIL OF VENTILATOR CURB
FOR 36" Ventilators
Scale 1/4" = 1'-0"
TYPICAL FOR ALL OPENINGS

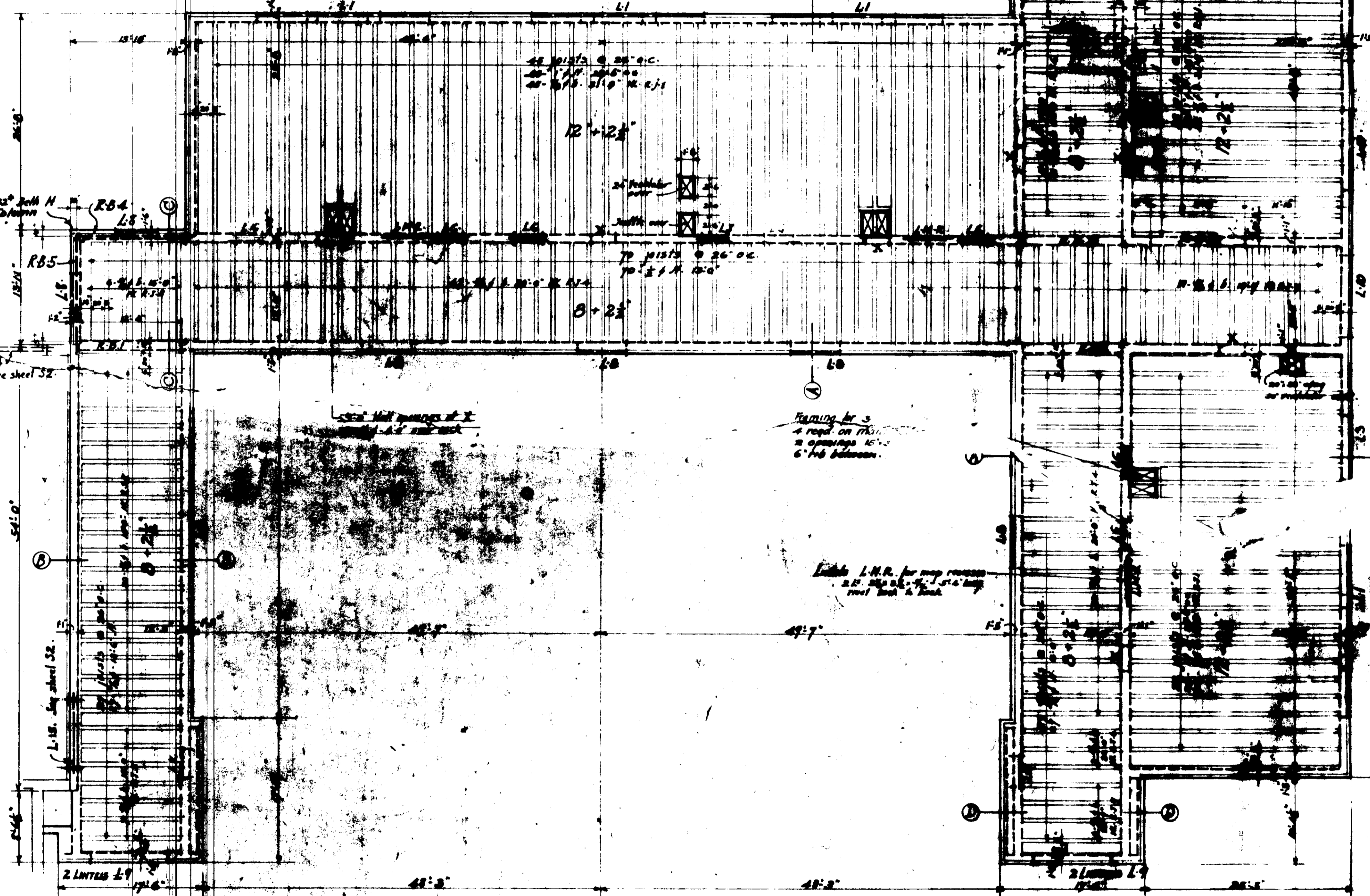
BENT BAR SCHEDULE - ROOF

MARK	SIZE	LENGTH	A	B	C	D	Weld to end	H'	
R31	7/8"	31'-9"	12"	3'-0"	20"	17'-4"	20"	6'-7"	12"
R20	1/2"	24'-0"	12"	3'-0"	20"	16'-9"	20"	6'-0"	12"
R74	5/8"	21'-0"	10"	1'-4"	16"	8'-0"	16"	8'-2"	8 1/2"
R75	5/8"	16'-0"	10"	1'-6"	16"	8'-0"	16"	5'-0"	8 1/2"
R76	5/8"	22'-0"	3'-2"	16"	8'-0"	16"	16"	8'-2"	8 1/2"
R77	5/8"	16'-9"	3'-0"	16"	8'-1"	16"	16"	5'-0"	8 1/2"
R78	5/8"	18'-0"	10"	1'-4"	16"	8'-0"	16"	1'-4"	8 1/2"
R81	5/8"	16'-0"	10"	1'-4"	16"	8'-0"	16"	1'-4"	8 1/2"
R82	5/8"	16'-0"	10"	1'-4"	16"	8'-0"	16"	1'-4"	8 1/2"



DOOR LINTELS - STEEL

16-17	24" x 36"	4'-5"
18-19	36" x 36"	4'-0"
20-21	36" x 36"	4'-4"
22-23	36" x 36"	4'-5"



MAIN ROOF FRAMING PLAN
Scale 1/8" = 1'-0"

- R.B. - See sheet S4 for general notes
- 16" - 24" - See sheet S4 for details
- 36" - 48" - See sheet S4 for details
- Top of main roof slab is level at an elevation of 48'-10 1/2" finished grade level.

ADDITION AND ALTERATIONS
FOR THE
HARRISON SCHOOL - PEORIA - ILL.

OP. NO. **949**

DESIGNED BY L.E.E. CHECKED BY L.E.E. APPROVED BY **H.E.**

HEWITT & EMERSON
ARCHITECTS
PEORIA, ILL.

SHEET **S3**

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

01.19-8-20-21 BLUL

Room 1 File Cab. #1

Second Floor and Auditorium Roof

DESIGNED BY H.P. ALVING 1953

Harrison

Second Floor + Auditorium

Roof Framing 8-20-21

DESIGNED BY H.P. ALVING 1953

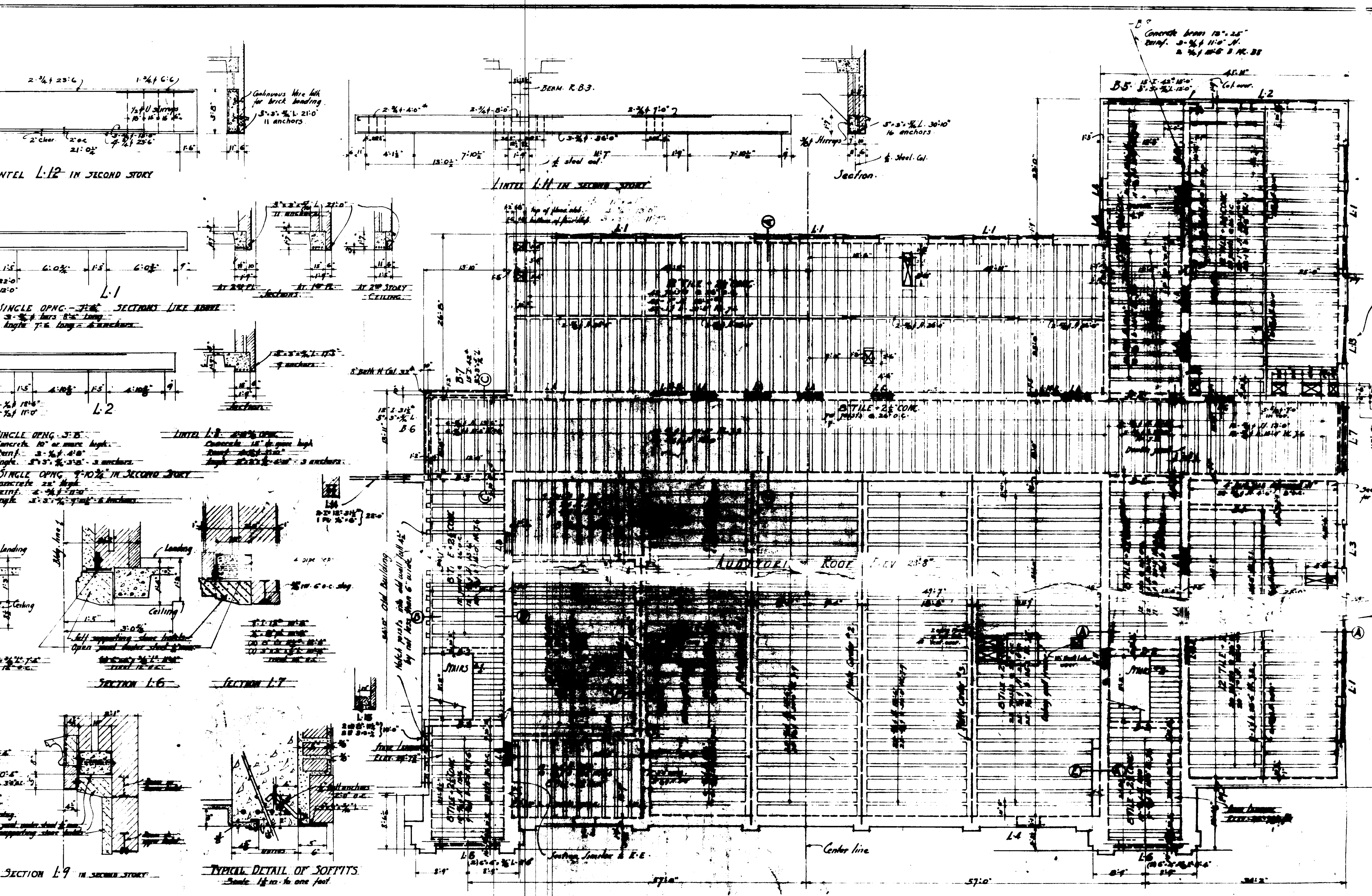
SAFOD PRODUCTS • NEW HOPE, MINNESOTA

SAFOD PRODUCTS • NEW HOPE, MINNESOTA

SAFOD PRODUCTS • NEW HOPE, MINNESOTA

SAFOD PRODUCTS • NEW HOPE, MINNESOTA

SAFOD PRODUCTS • NEW HOPE, MINNESOTA



SECOND FLOOR AND AUDITORIUM ROOF FRAMING PLAN

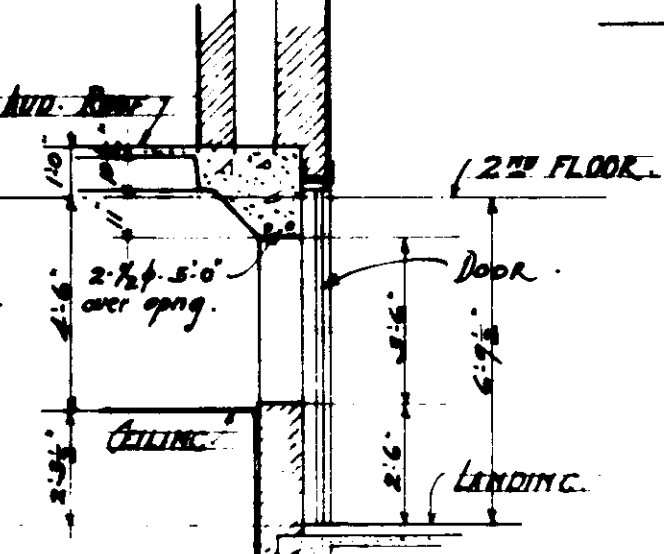
Scale 1/4" inch to one foot.

CEILING GULL FRAMES (2 ROOMS)
Made of 6" x 6" & 5" x 8" square made
with flanges turned out. Spaced from
joists over with 4-5/8" rods both directions.

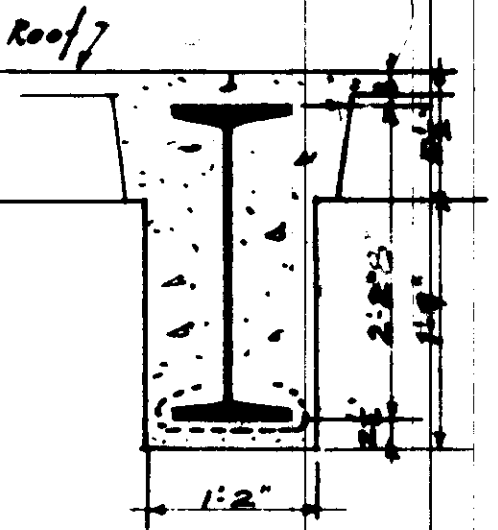
DETAILS OF EXTERIOR LINTELS
Scale 1/2" inch and 3/8" inch to one foot.

- LINTELS - STEEL
- 2" x 2" x 3/4" L 2-0
- 3" x 3" x 3/4" L 2-0
- 4" x 4" x 3/4" L 2-0
- 4" x 4" x 1/2" L 2-0
- 4" x 4" x 1/2" L 2-0
- 4" x 4" x 1/2" L 2-0
- 3 1/2" x 3 1/2" x 1/2" L 1-0
- 3 1/2" x 3 1/2" x 1/2" L 1-0
- 3 1/2" x 3 1/2" x 1/2" L 1-0

SECTION F-E
Scale 1/2" inch to 1'-0"



SECTION F-F
Scale 1/4" inch to 1'-0"



- H.B. for steel 5/8" per slab section
 - 3/8" plate gusset details
 - 3/8" plate gusset details
 - 3/8" plate gusset details
 - 3/8" plate gusset details
- Flange nuts used over from first story grade to top of slab except in situations given elsewhere as 3/4" x 5"

ADDITION AND A
FOR THE
HARRISON SCHOOL

OP NO 949

DRAWN BY L.E.W. ARCHT
TRACED BY L.E.W. ARCHT
NEWTON & B...
420 PEARSON BLDG

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

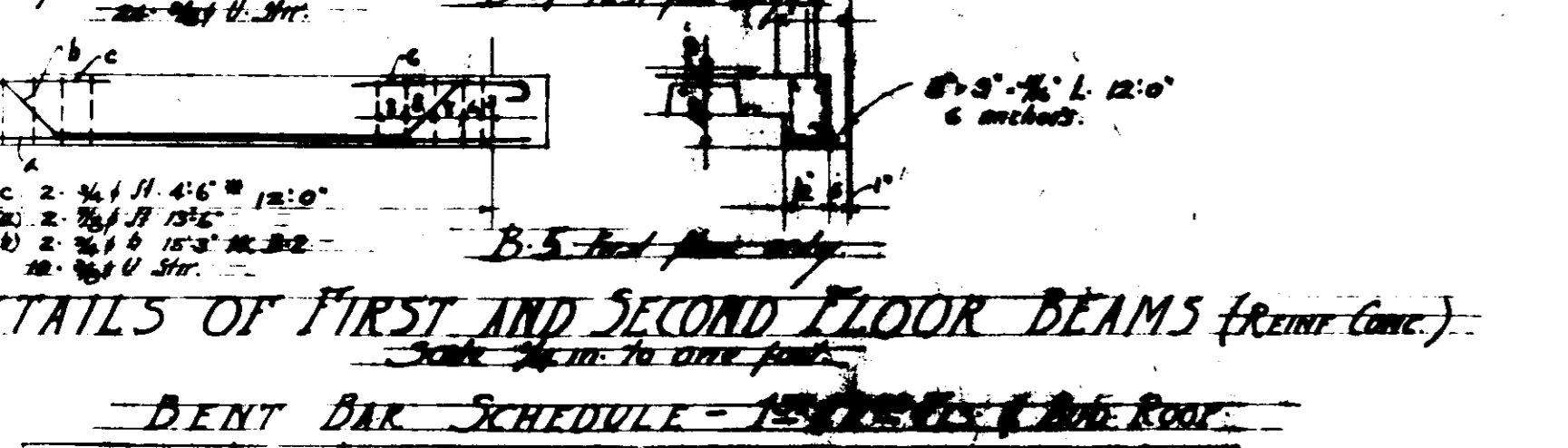
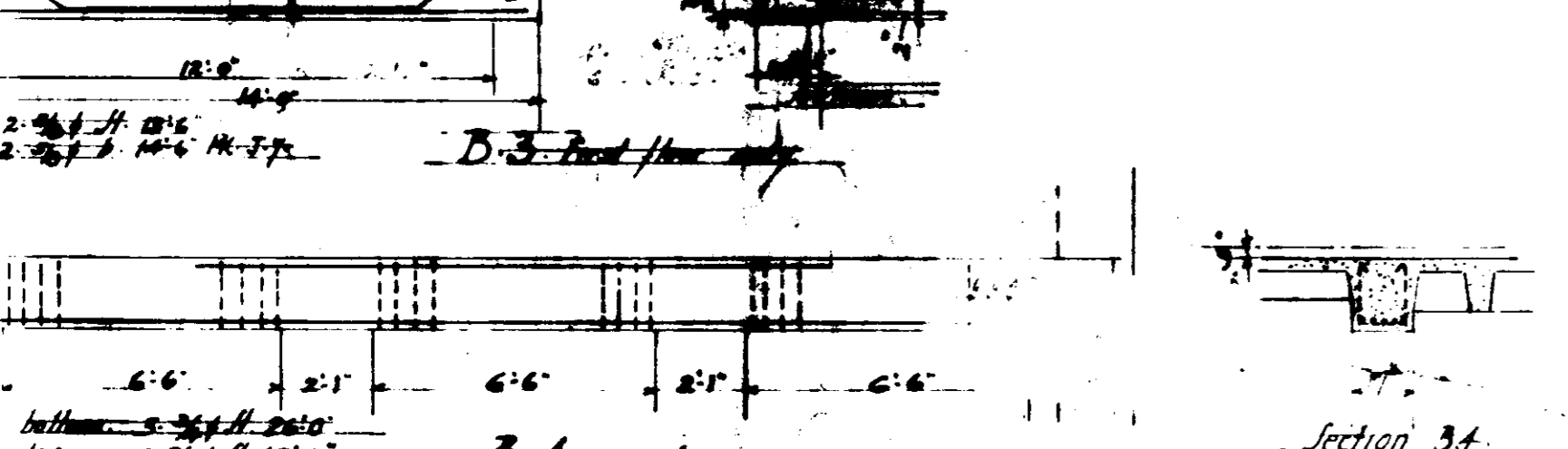
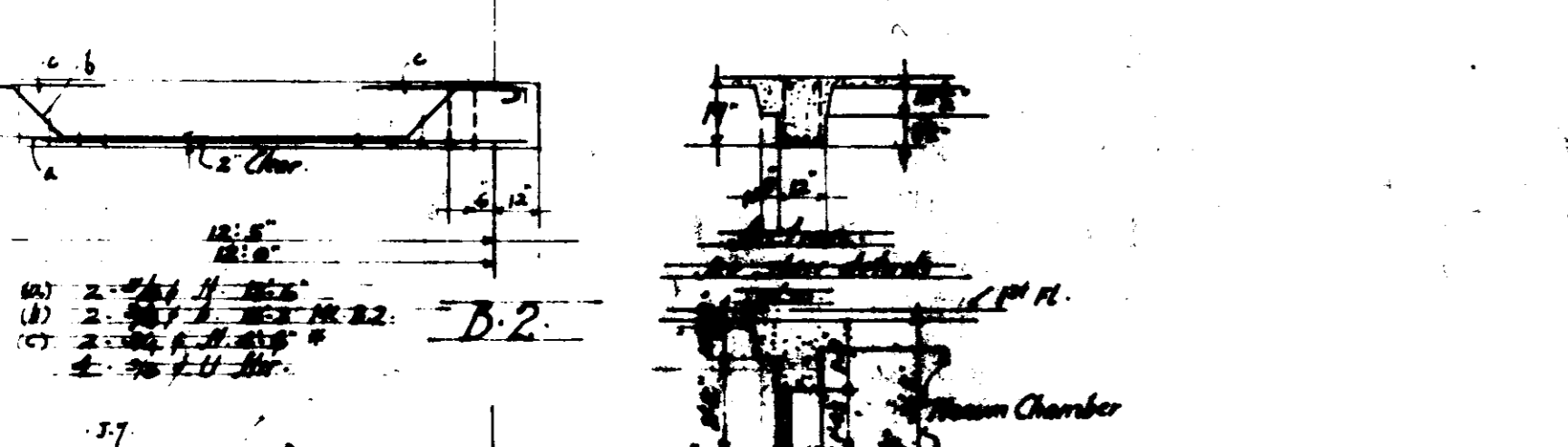
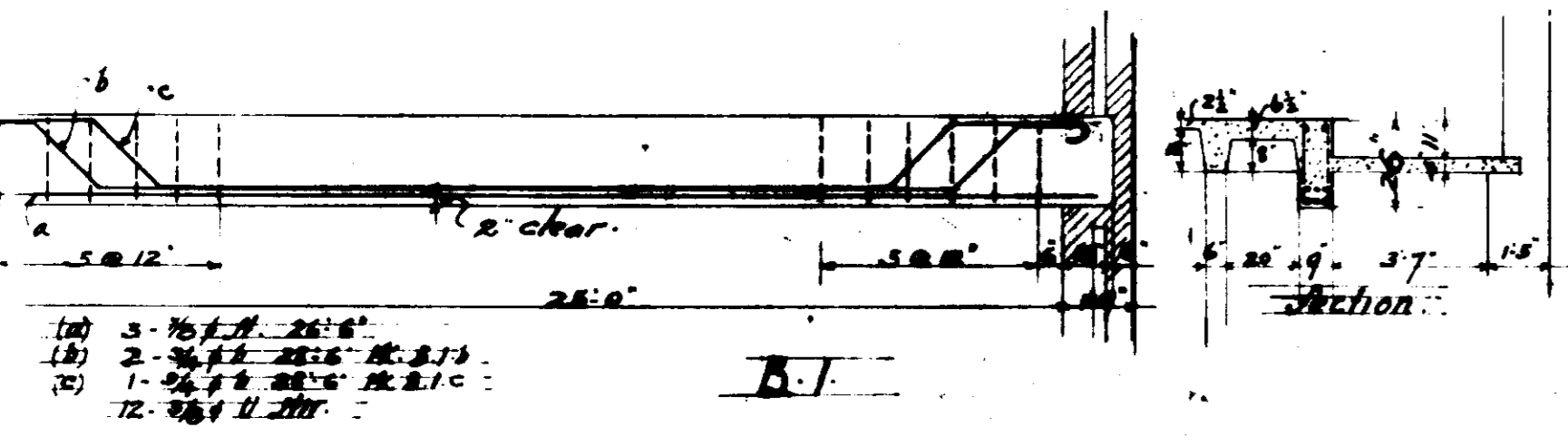
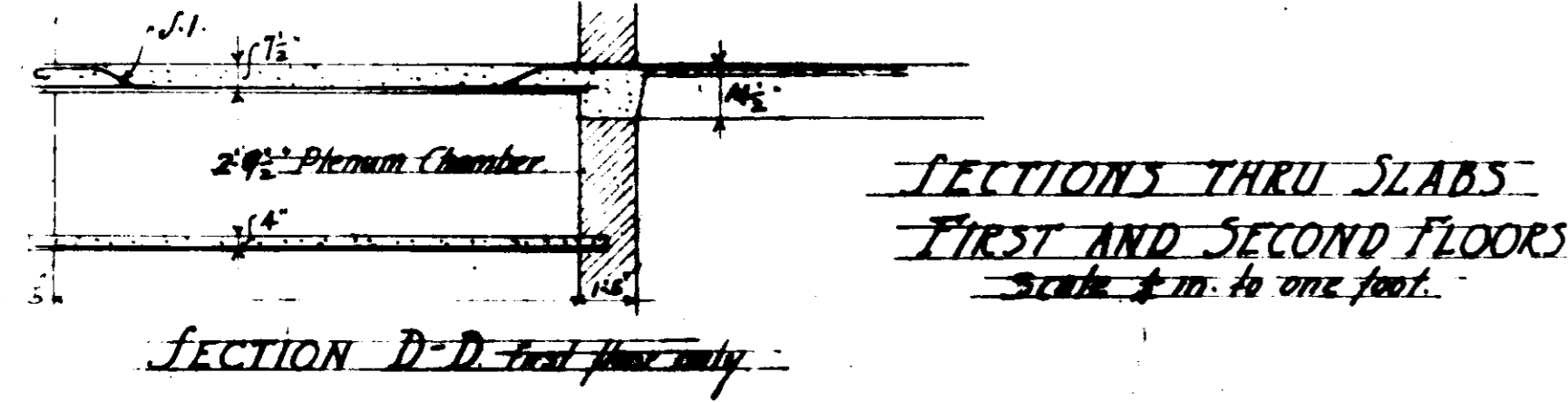
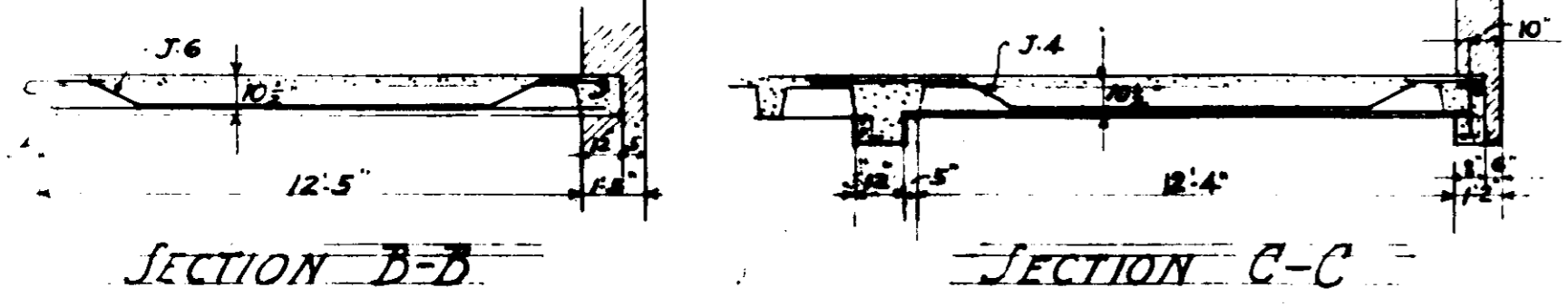
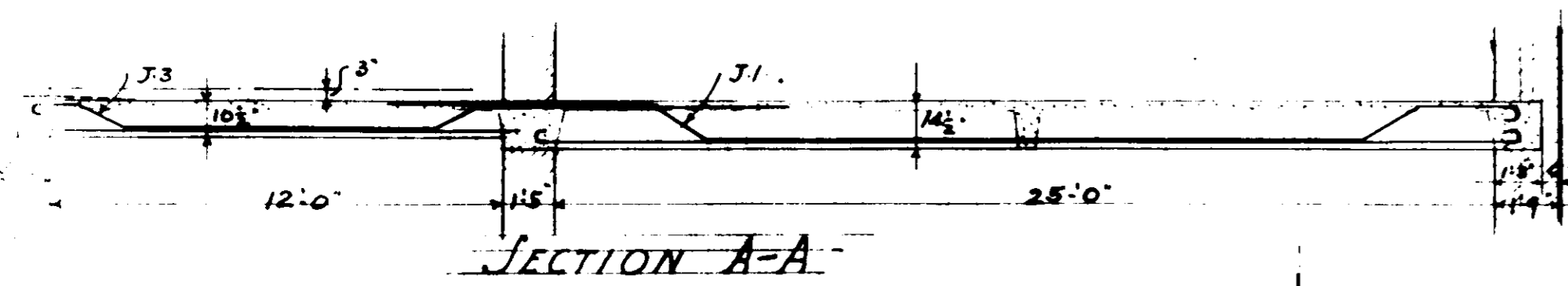
SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

01.19-8-20-21 BLUL
Room 1 File Cab. # 1
First Floor Framing
SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

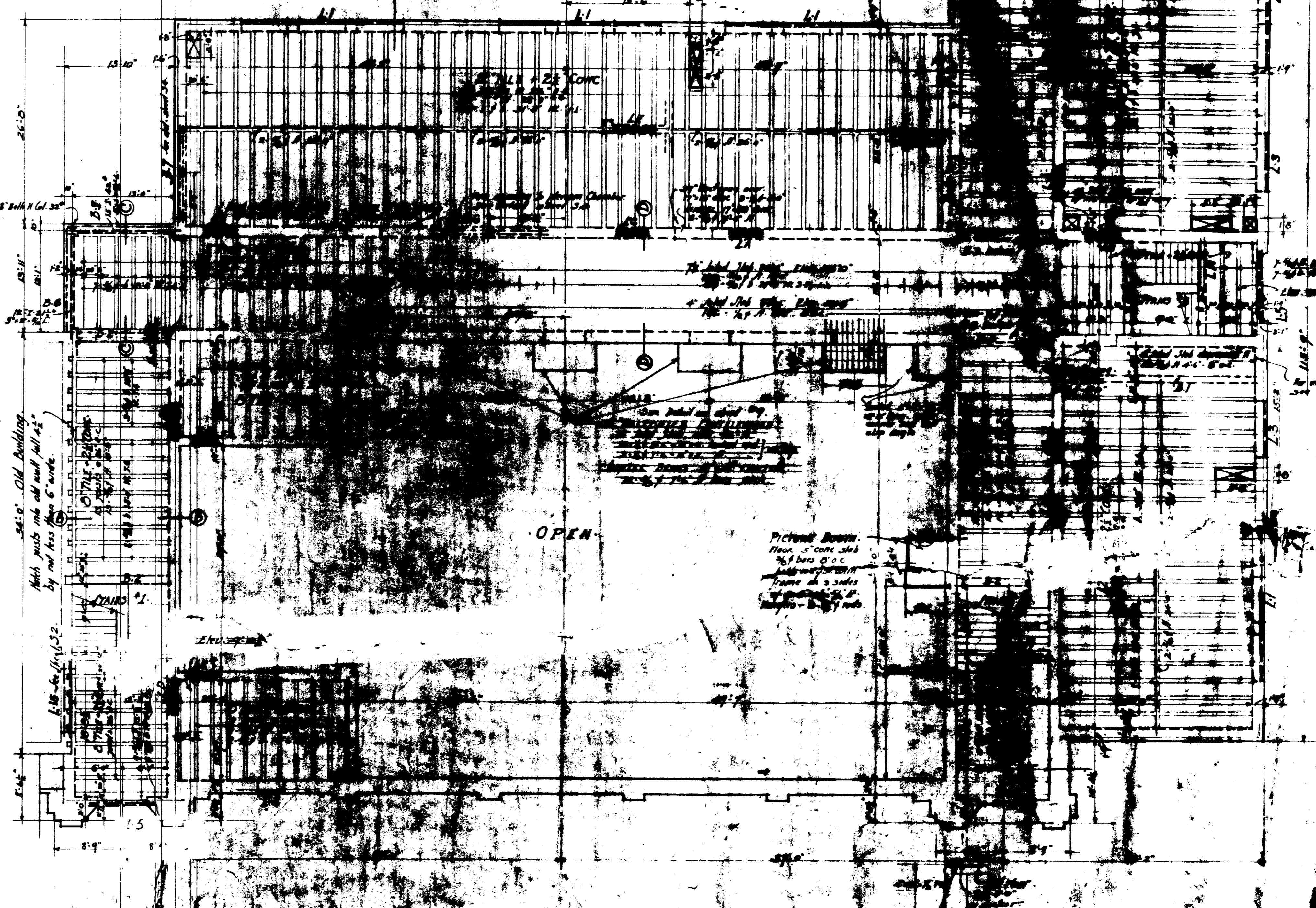
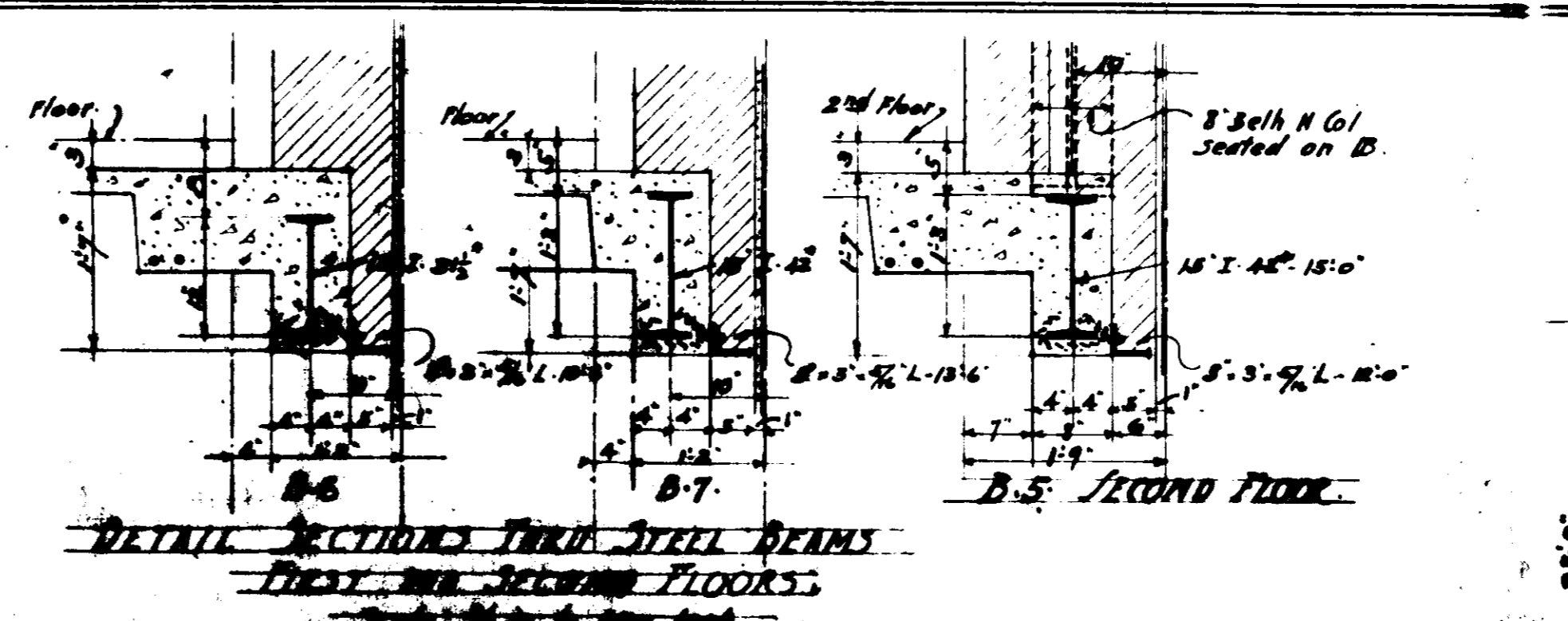
Harrison
First Floor Framing
Heavy Construction
SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553



DOOR LINTELS - STEEL

LA	2 pair	2 1/2" x 3 1/2" x 1/2" L	4'-0"
LB	1 "	2 1/2" x 3 1/2" x 1/2" L	4'-0"
LC	2 "	2 1/2" x 3 1/2" x 1/2" L	4'-0"
LD	2 "	2 1/2" x 3 1/2" x 1/2" L	4'-0"
LE	1 pair	2 1/2" x 3 1/2" x 1/2" L	4'-0"
LF	2 strips	2 1/2" x 3 1/2" x 1/2" L	7'-0"



DETAILS OF FIRST AND SECOND FLOOR BEAMS (Cont. Cont.)
Scale 3/4" = 1'-0"

DENT BAR SCHEDULE - 15# REINFORCING BARS

MAX SIZE	LENGTH	A	B	C	D	H				
J-1	1'	31'-0"	12'	3'-0"	20'	16'-8"	20'	7'-0"	1'-11"	18 1/2"
J-2	1'	28'-3"	12'	3'-0"	20'	16'-8"	20'	3'-0"	1'-11"	18 1/2"
J-3	3/8"	21'-3"	10'	1'-4"	16'	8'-0"	20'	8'-5"	1'-4"	8 1/2"
J-4	3/8"	18'-8"	10'	1'-0"	16'	8'-0"	16'	5'-8"	1'-4"	8 1/2"
J-5	3/8"	24'-3"	10'	5'-2"	16'	8'-0"	16'	8'-5"	1'-4"	8 1/2"
J-6	3/8"	15'-0"	10'	1'-4"	14'	8'-0"	14'	1'-4"	10'	8 1/2"
J-7	3/8"	15'-6"	10'	1'-7"	14'	8'-0"	14'	1'-7"	10'	8 1/2"
S-1	3/8"	21'-0"	10'	1'-4"	12'	8'-0"	12'	8'-0"	1'-1"	6"
B-1	3/8"	29'-0"	12'	3'-0"	20'	16'-8"	20'	8'-5"	12'	20"
B-1c	3/8"	29'-0"	12'	3'-2"	20'	16'-0"	20'	3'-2"	12'	20"
B-2	3/8"	16'-0"	12'	1'-3"	15'	8'-0"	15'	1'-3"	11'	15"
J-5	3/8"	28'-3"	12'	3'-0"	14'	12'-3"	14'	9'-4"	1'-4"	8 1/2"
J-9	3/8"	30'-0"	12'	9'-8"	16'	8'-5"	14'	9'-8"	1'-4"	8 1/2"
J-10	3/8"	28'-0"	12'	4'-1"	14'	9'-5"	14'	8'-10"	1'-4"	8 1/2"
S-2	3/8"	17'-0"	10'	3'-5"	12'	8'-0"	12'	3'-5"	11'	6"
J-11	3/8"	18'-0"	10'	2'-8"	14'	8'-0"	14'	8'-0"	1'-4"	8 1/2"
B-8	3/8"	14'-6"	12'	9'	21'	5'-0"	21'	7'-9"	2'-6"	20"
S-3	3/8"	14'-6"	10'	1'-4"	12'	8'-0"	12'	1'-4"	10'	6"

Alternately reversed.

GENERAL NOTES

All tie for floor and roof slabs is 3-#4
layers steel forms with straight endforms
All concrete for reinforced work and forms
to be of 3,280 max. to develop 8000 lbs. ultimate
strength at 30 days
All reinforcing steel to be intermediate
deformed bars of new billet stock

FIRST FLOOR FRAMING PLAN
Scale 1/4" = 1'-0"



ADDITION AND ALTERATIONS
FOR THE
HARRISON SCHOOL, PEORIA, ILL.

NO. 49 SHEET 51

HEWITT & EMERSON
ARCHITECTS

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

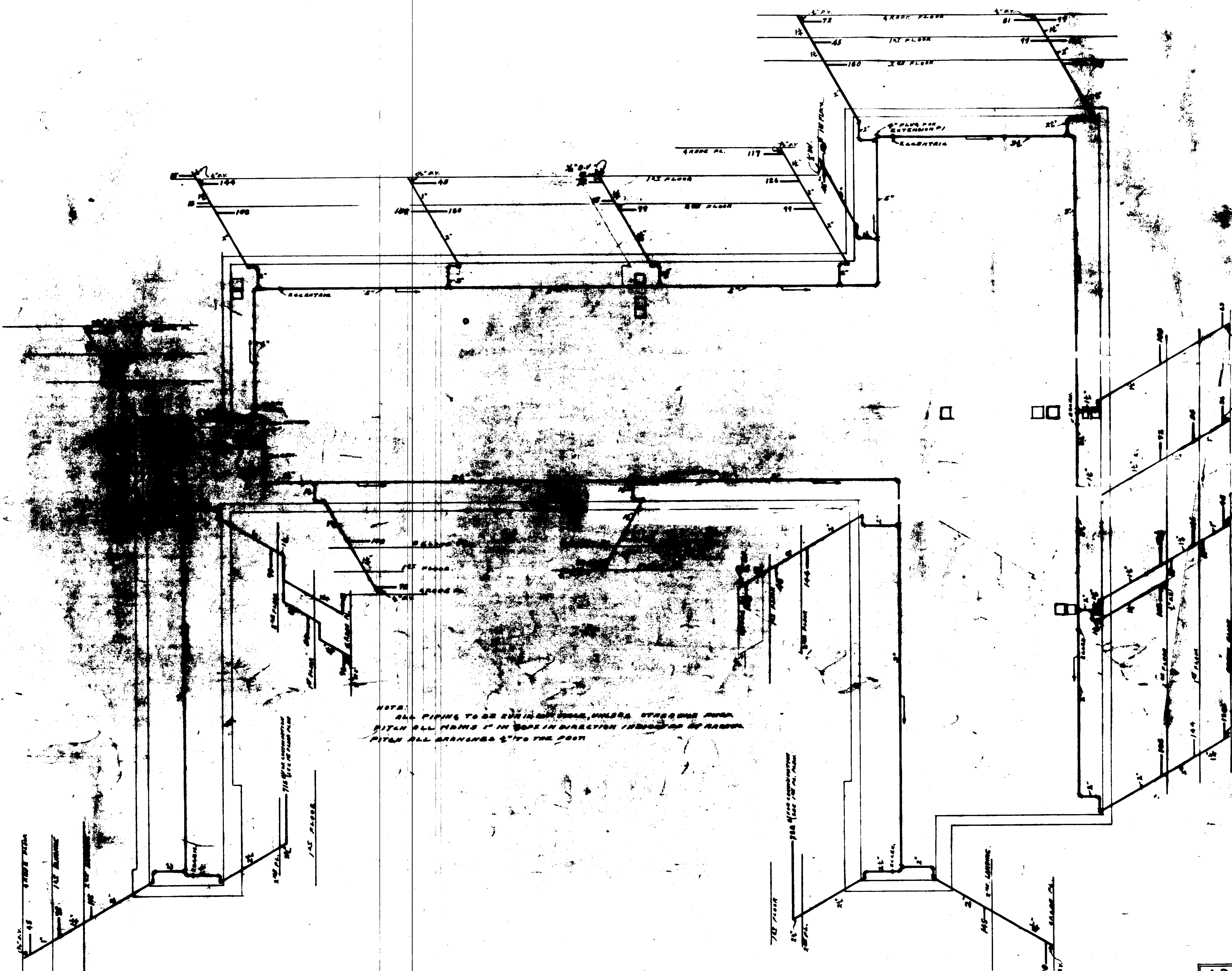
SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 8253
POSITION EDGE OF PRINT ON THIS LINE

SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 8253
POSITION EDGE OF PRINT ON THIS LINE

SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 8253
POSITION EDGE OF PRINT ON THIS LINE

01.19-8-20-21 BLUL
Room 1 File Cab. # 1
Roof Plan - Piping
SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 8253
POSITION EDGE OF PRINT ON THIS LINE

Harrison
S-4
Roof Plan - Piping
8-20-21
SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 8253
POSITION EDGE OF PRINT ON THIS LINE



NOTE: ALL PIPING TO BE EQUIVALENT TO 1/2\"/>

ROOF PLAN
SCALE 3/4" = 1'-0"

ADDITION AND
FOR
HARRISON C
CP NO

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER 4

DRAWING NUMBER

SAFOD PRODUCTS • NEW HOPE, MINNESOTA
ORDER BY PART NUMBER 6553
POSITION EDGE OF PRINT ON THIS LINE

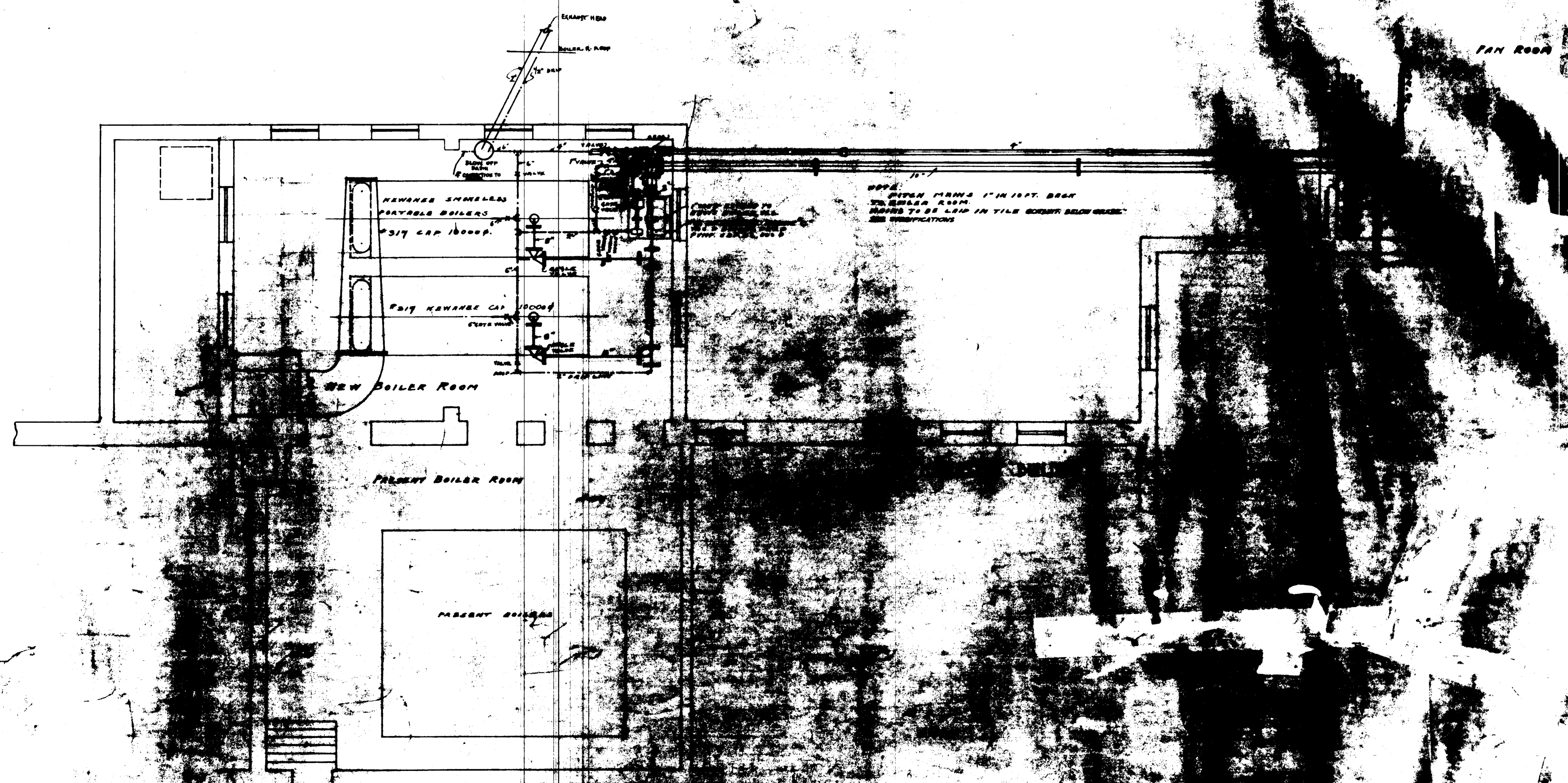
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ORDER BY PART NUMBER 6553
POSITION EDGE OF PRINT ON THIS LINE

SAFOD PRODUCTS • NEW HOPE, MINNESOTA
ORDER BY PART NUMBER 6553
POSITION EDGE OF PRINT ON THIS LINE

01.19-8-20-21 BLUL
Room 1 File Cab. # 1
New Boiler Room - Floor Plan
ORDER BY PART NUMBER 6553
POSITION EDGE OF PRINT ON THIS LINE

Harrison
New Boiler Room Floor Plan
8-20-21
SAFOD PRODUCTS • NEW HOPE, MINNESOTA
ORDER BY PART NUMBER 6553
POSITION EDGE OF PRINT ON THIS LINE

SAFOD PRODUCTS • NEW HOPE, MINNESOTA
ORDER BY PART NUMBER 6553
POSITION EDGE OF PRINT ON THIS LINE



NEW BOILER ROOM FLOOR PLAN
SCALE 1/4" = 1'-0"

ADDITION AND ALTERATIONS
FOR THE
PRISON SCHOOL PEORIA ILL.

HEWITT & EMERSON
ARCHITECTS
1400 PEORIA ST. PEORIA, ILL.

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER 4

01.19-8-20-21 BLUL
Room 1 File Cab. #1

Second Floor

SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 1552

Harrison
Second Floor
8-20-21

SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 1552



SECOND FLOOR PLAN.

SCALE 1/4" = 1'-0"

ADD
HARRISON

DRAWING NUMBER

SAPUD PRODUCTS • NEW HOPE, MINNESOTA
RENDERED BY PART NUMBER 8555

DRAWING NUMBER

SAPUD PRODUCTS • NEW HOPE, MINNESOTA
RENDERED BY PART NUMBER 8555

DRAWING NUMBER

SAPUD PRODUCTS • NEW HOPE, MINNESOTA
RENDERED BY PART NUMBER 8555

DRAWING NUMBER

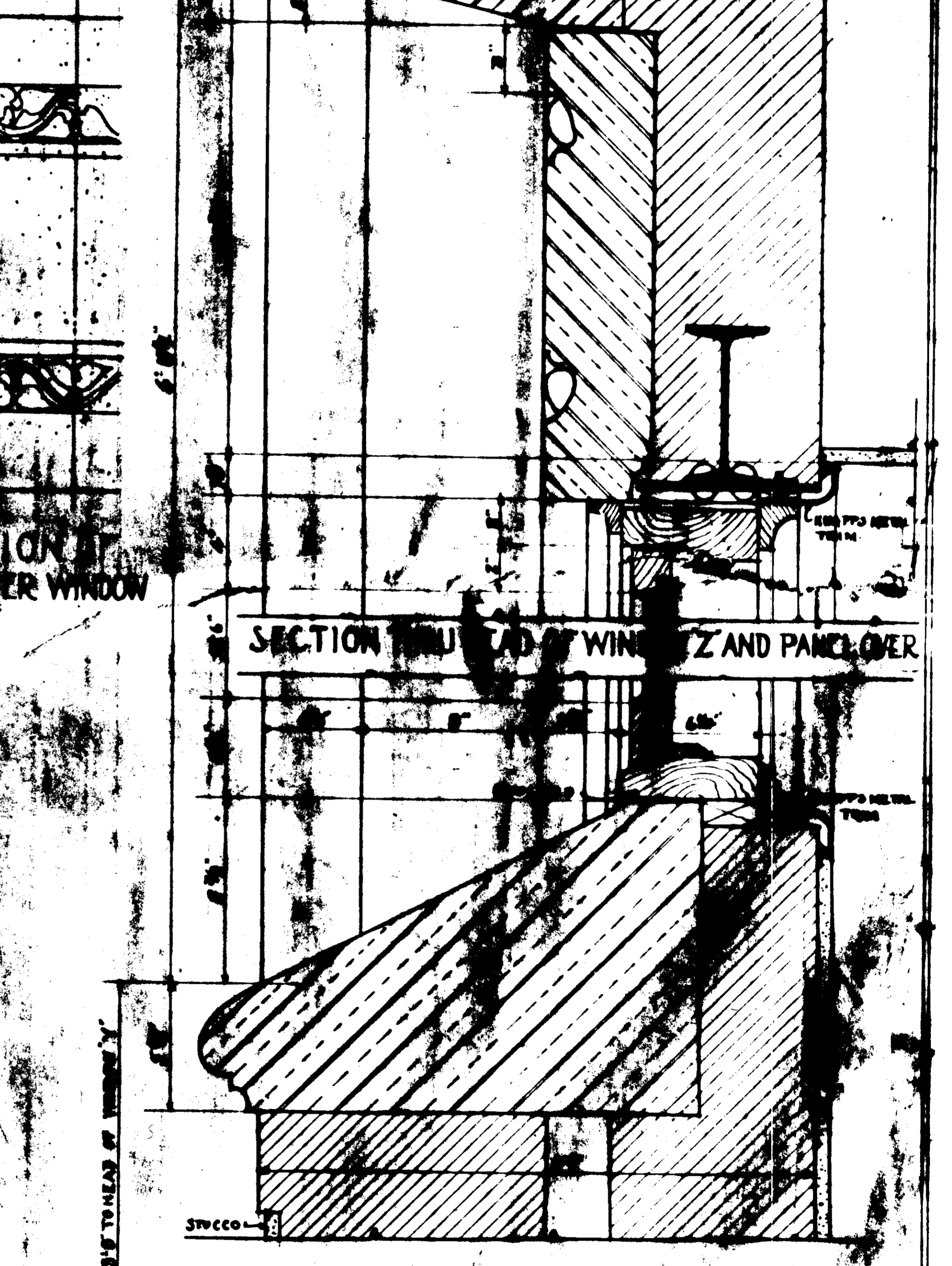
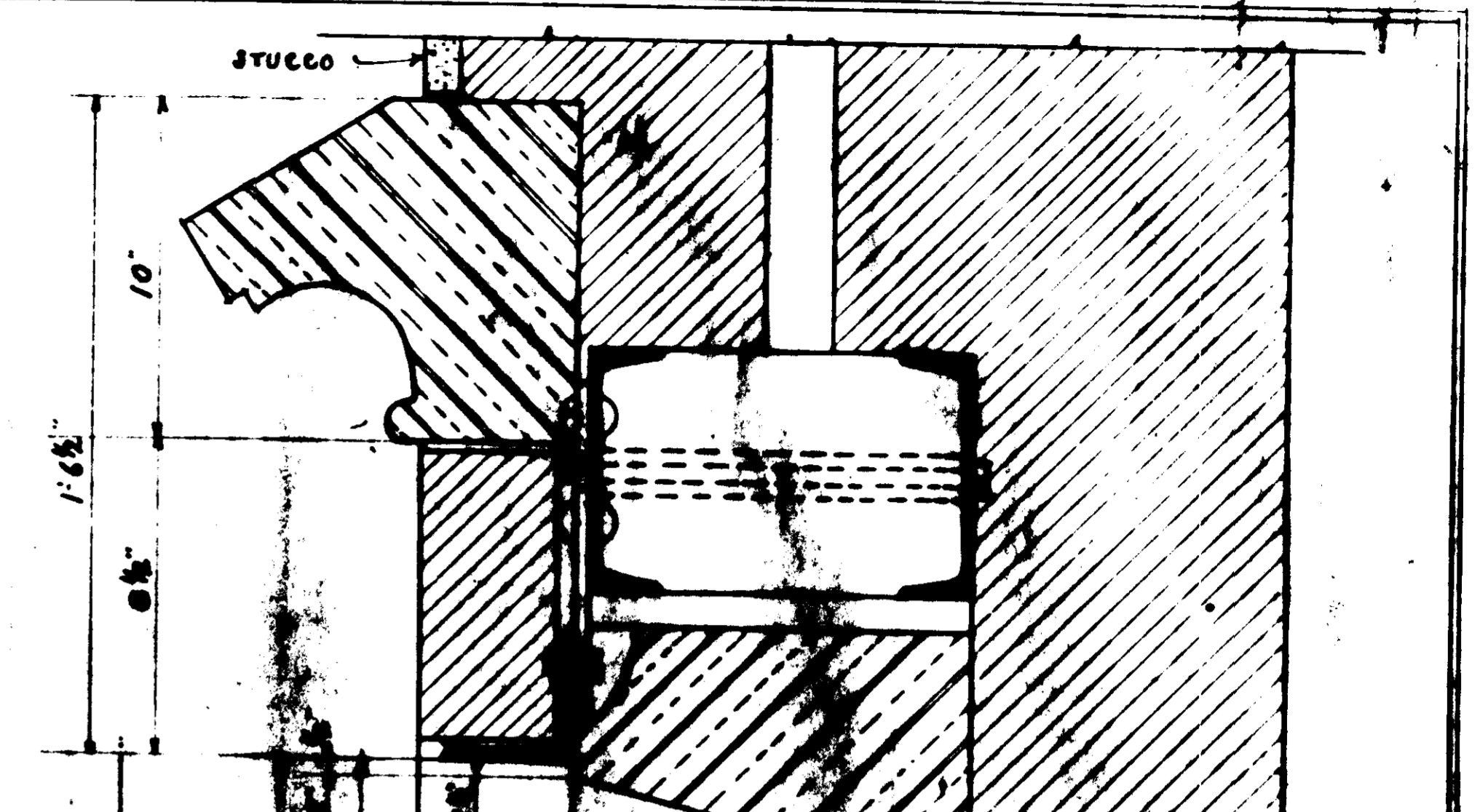
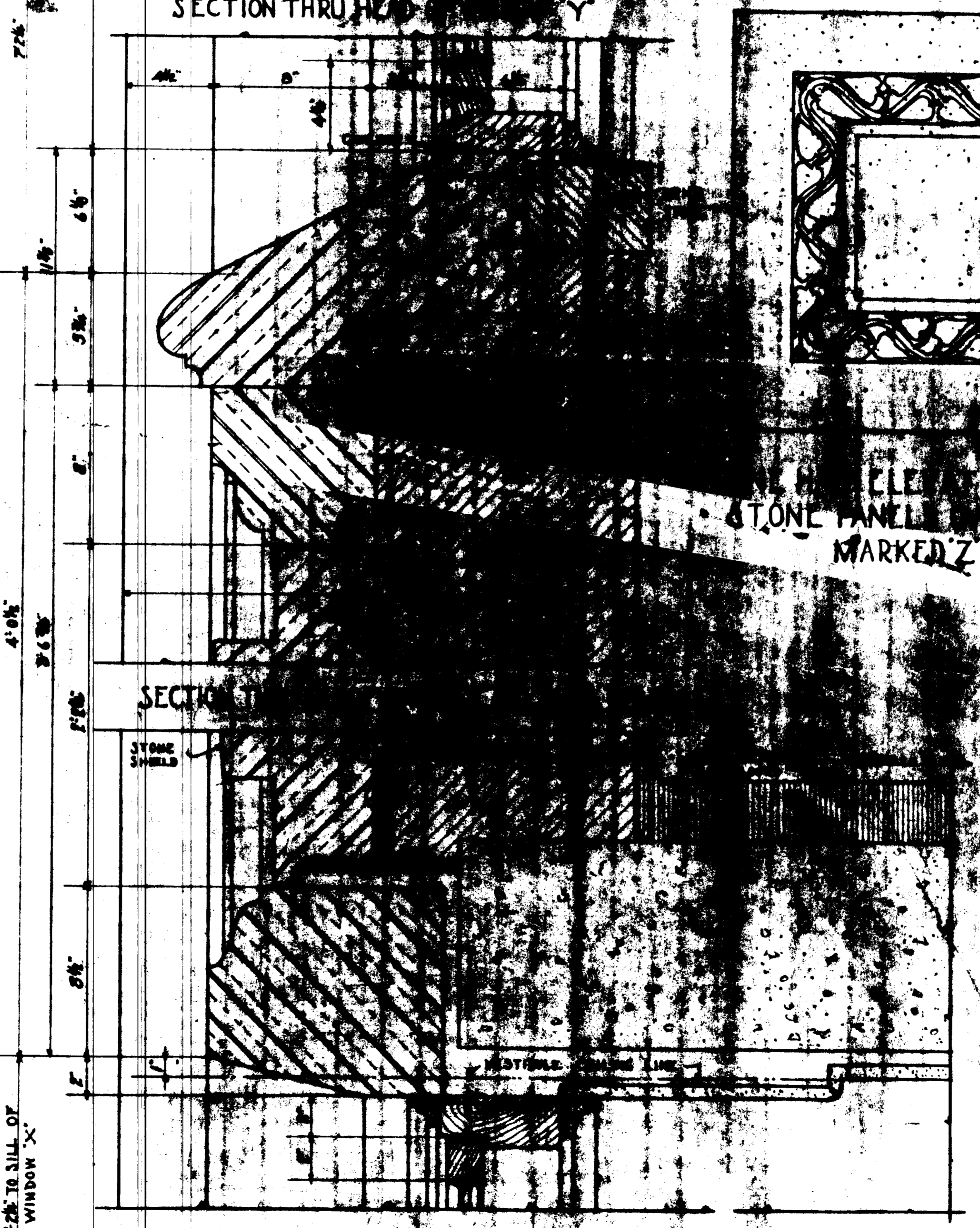
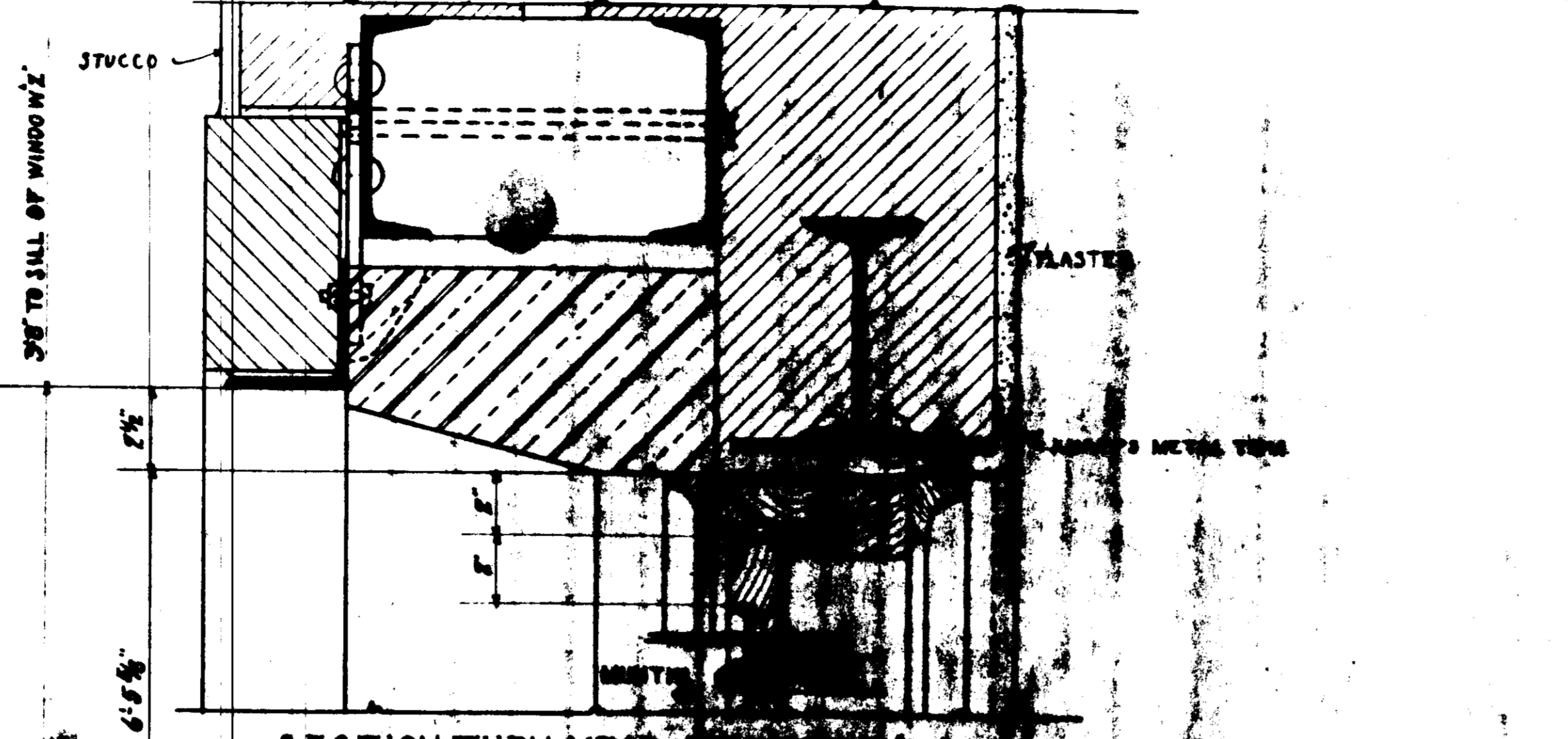
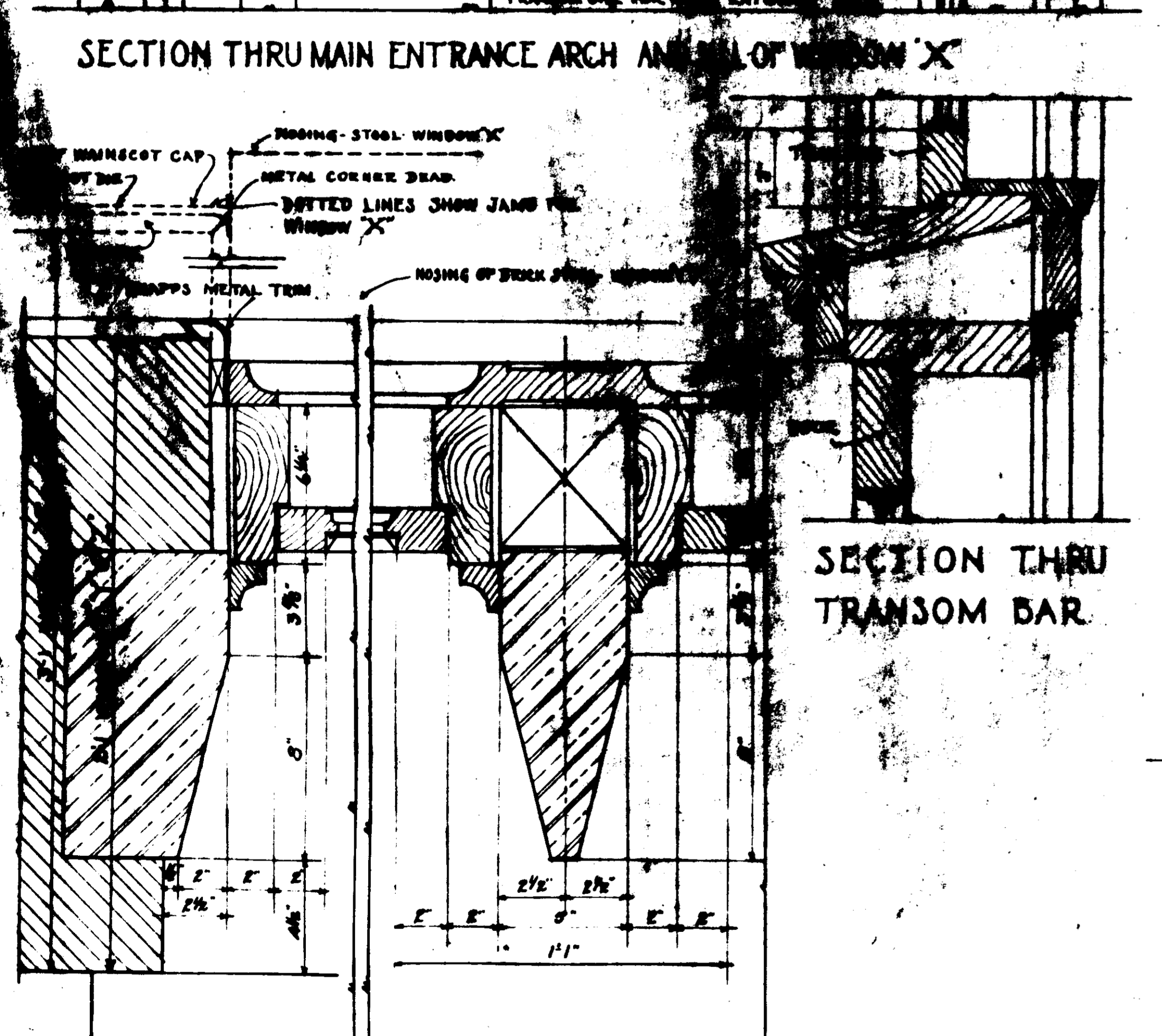
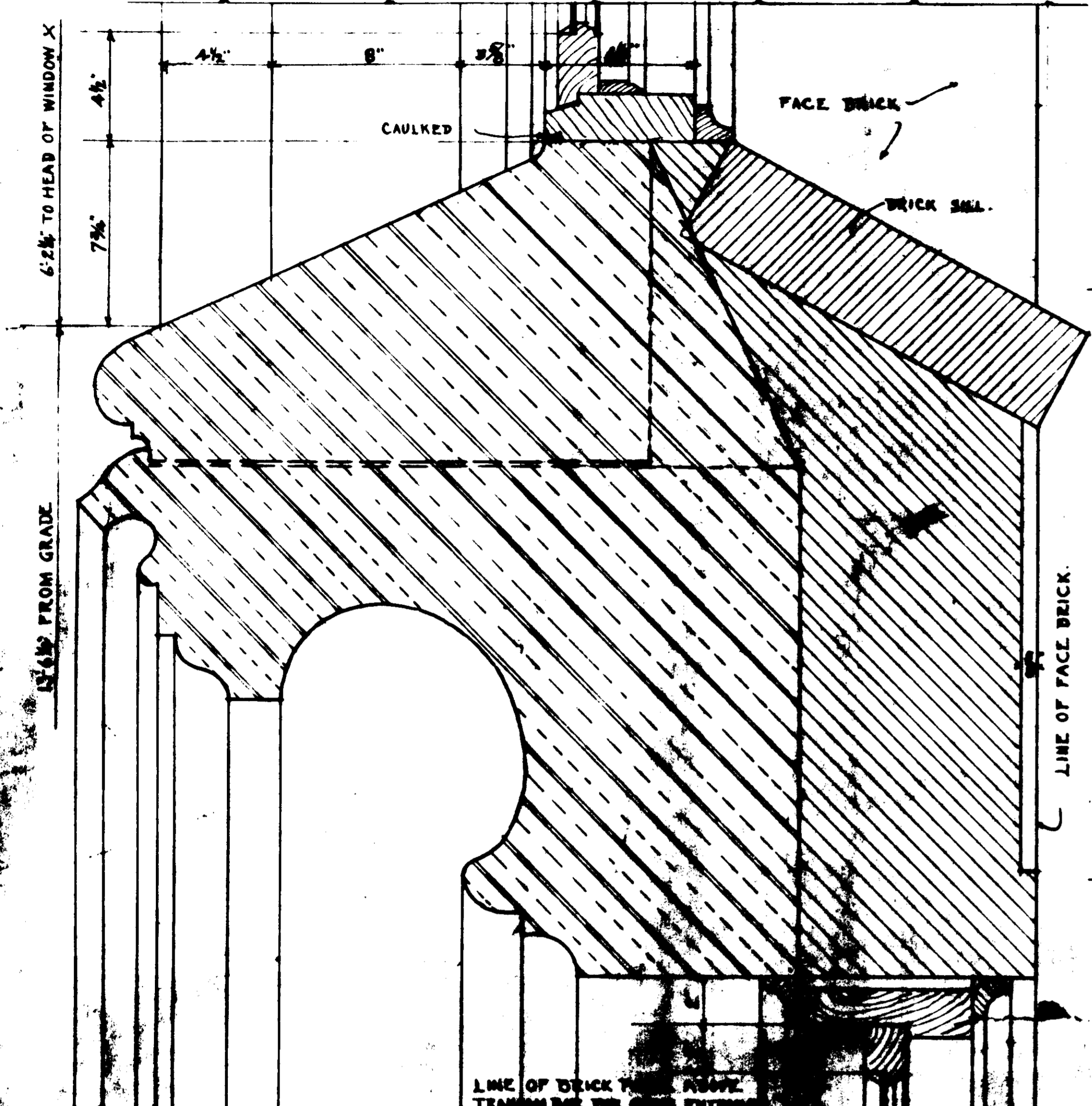
01-19-8-20-21 BLUL
Room 1 File Cab. # 1
Stonework and Windows
SAPUD PRODUCTS • NEW HOPE, MINNESOTA
RENDERED BY PART NUMBER 8555

DRAWING NUMBER (11)

Harrison
Stonework + Windows
Hewitt-Emerson Peoria, Ill.
SAPUD PRODUCTS • NEW HOPE, MINNESOTA
RENDERED BY PART NUMBER 8555

DRAWING NUMBER

SAPUD PRODUCTS • NEW HOPE, MINNESOTA
RENDERED BY PART NUMBER 8555



ADDITION AND ALTERATIONS
FOR THE
HARRISON SCHOOL PEORIA, ILL.

OP. NO. 349
DRAWN BY L. M. C.
CHECKED BY
H. W. T. & E. M. S.
HARRISON SCHOOL DISTRICT
PEORIA, ILL.

APPROVED BY
H. W. T. & E. M. S.
ARCHITECTS
PEORIA, ILL.

SHEET 14

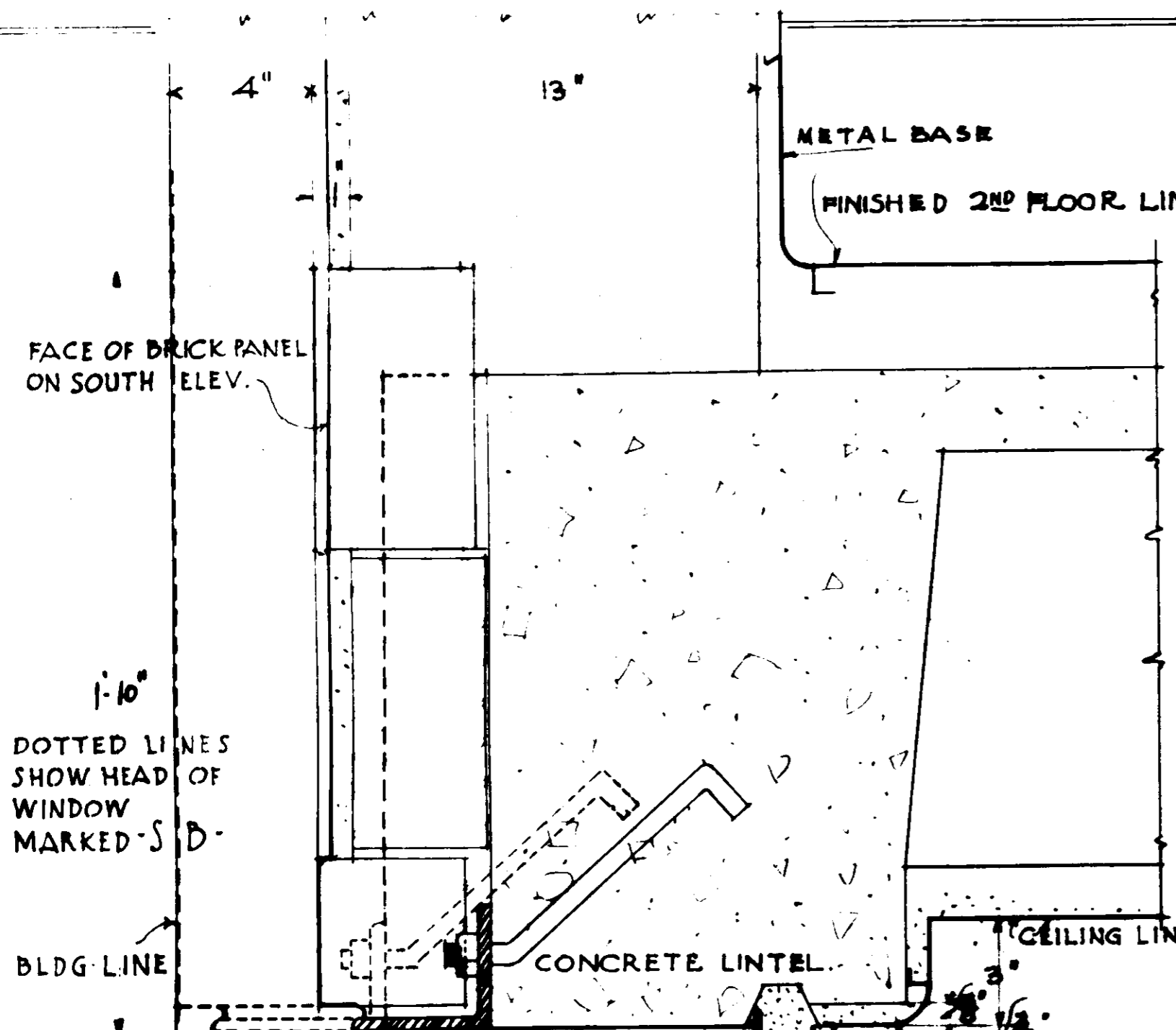
SAFECO PRODUCTS • NEW HOPE, MINNESOTA
TELEPHONE 461-1111 • CREDIT 3303
NEW HOPE, MINNESOTA

SAFECO PRODUCTS • NEW HOPE, MINNESOTA
TELEPHONE 461-1111 • CREDIT 3303
NEW HOPE, MINNESOTA

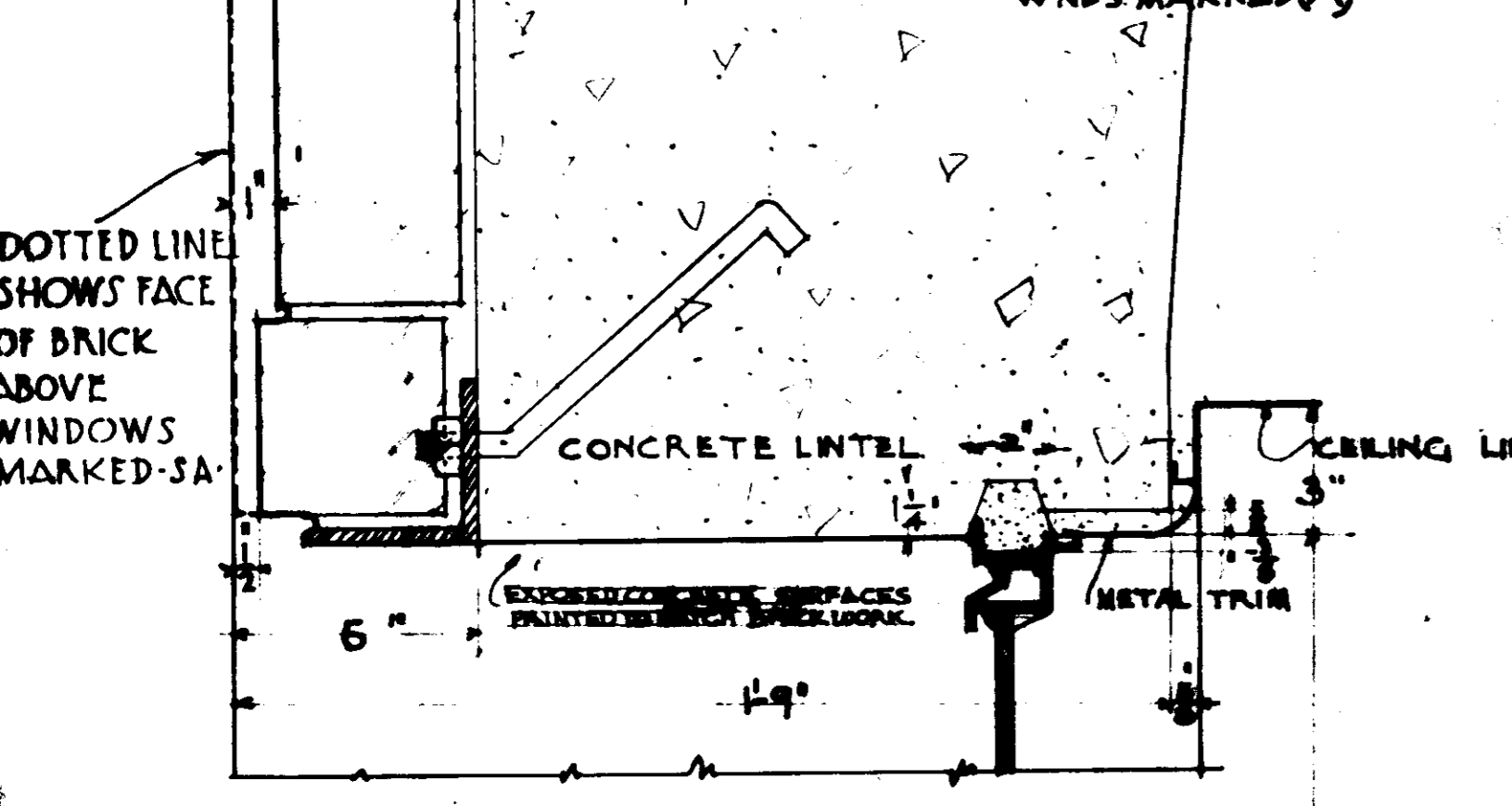
SAFECO PRODUCTS • NEW HOPE, MINNESOTA
TELEPHONE 461-1111 • CREDIT 3303
NEW HOPE, MINNESOTA

01.19-8-20-21 BLUL
Room 1 File Cab. # 1
Details
SAFECO PRODUCTS • NEW HOPE, MINNESOTA
TELEPHONE 461-1111 • CREDIT 3303
NEW HOPE, MINNESOTA

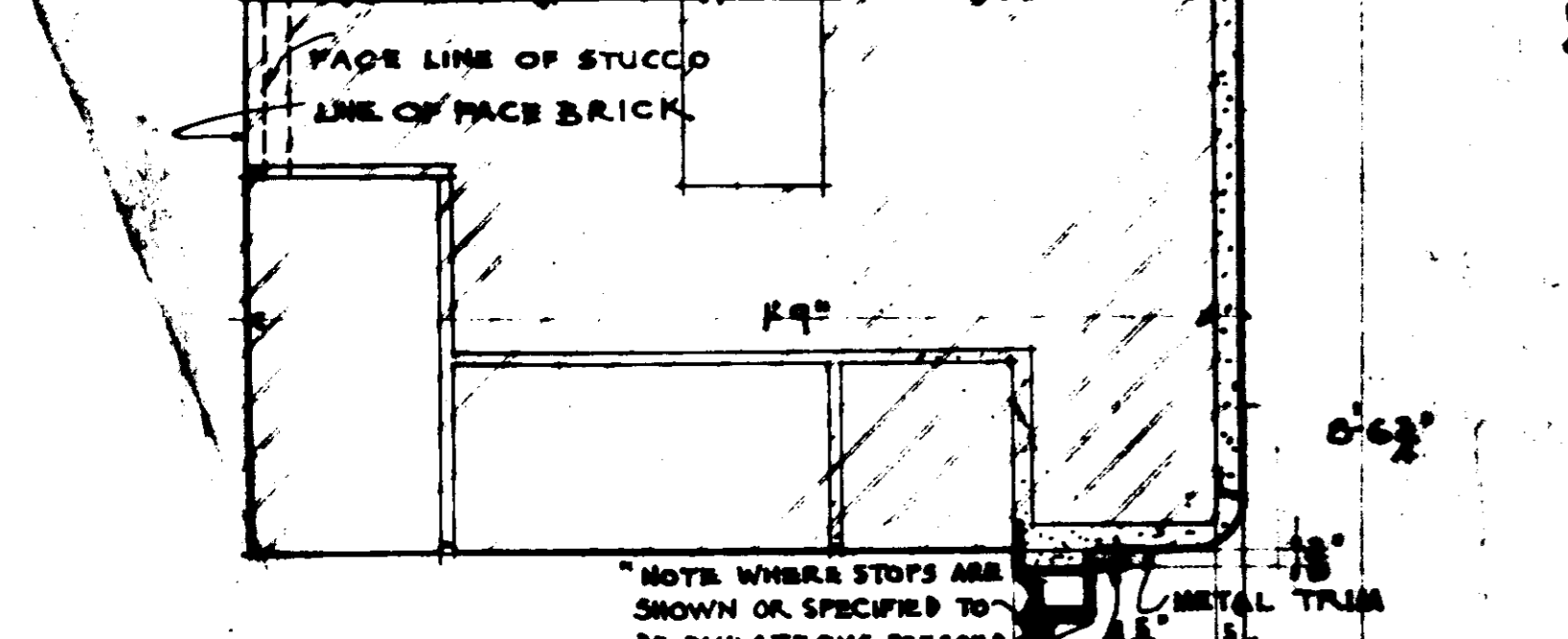
Harrison
Details
Hewitt-Emerson 8-20-21
SAFECO PRODUCTS • NEW HOPE, MINNESOTA
TELEPHONE 461-1111 • CREDIT 3303
NEW HOPE, MINNESOTA



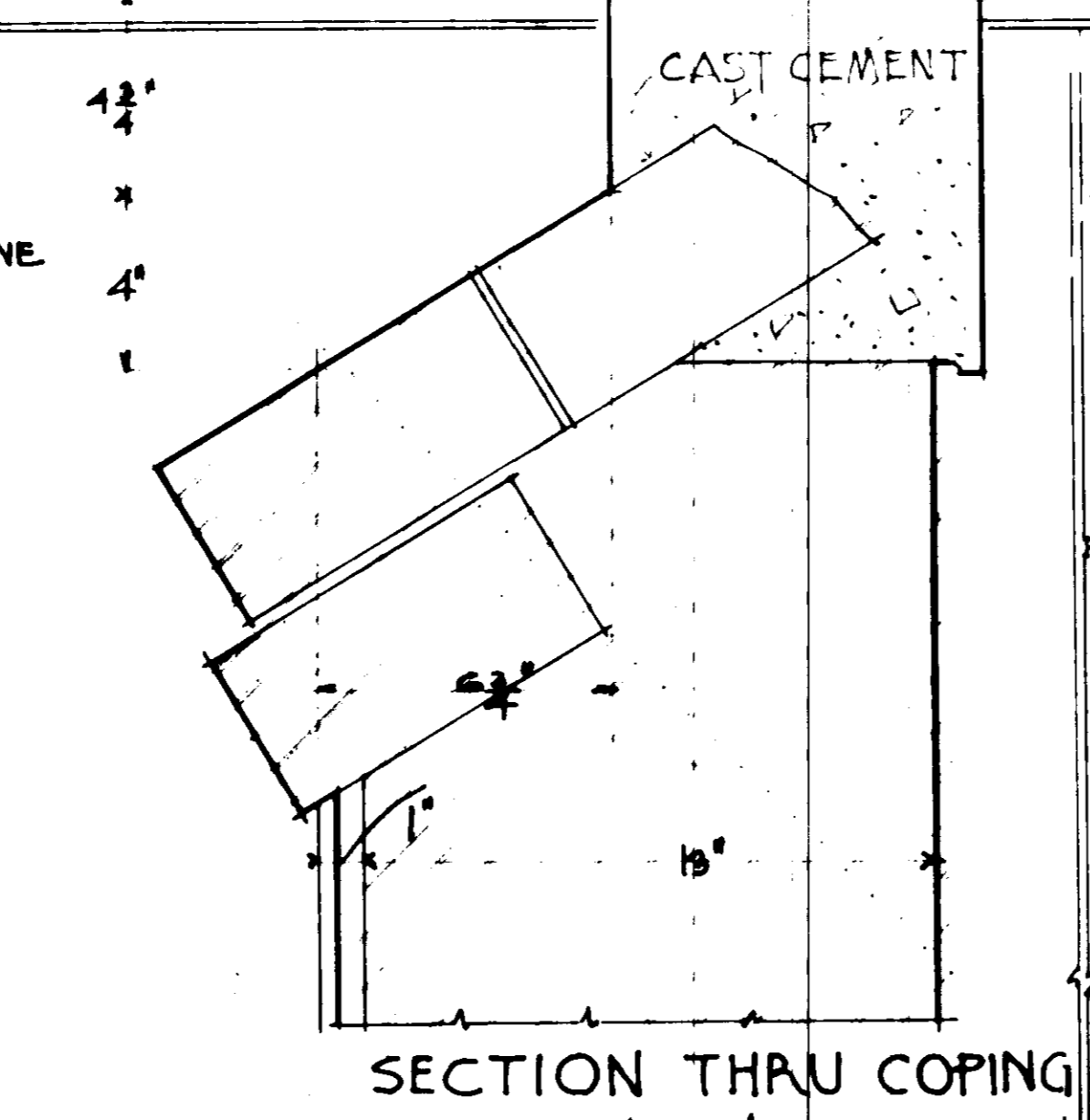
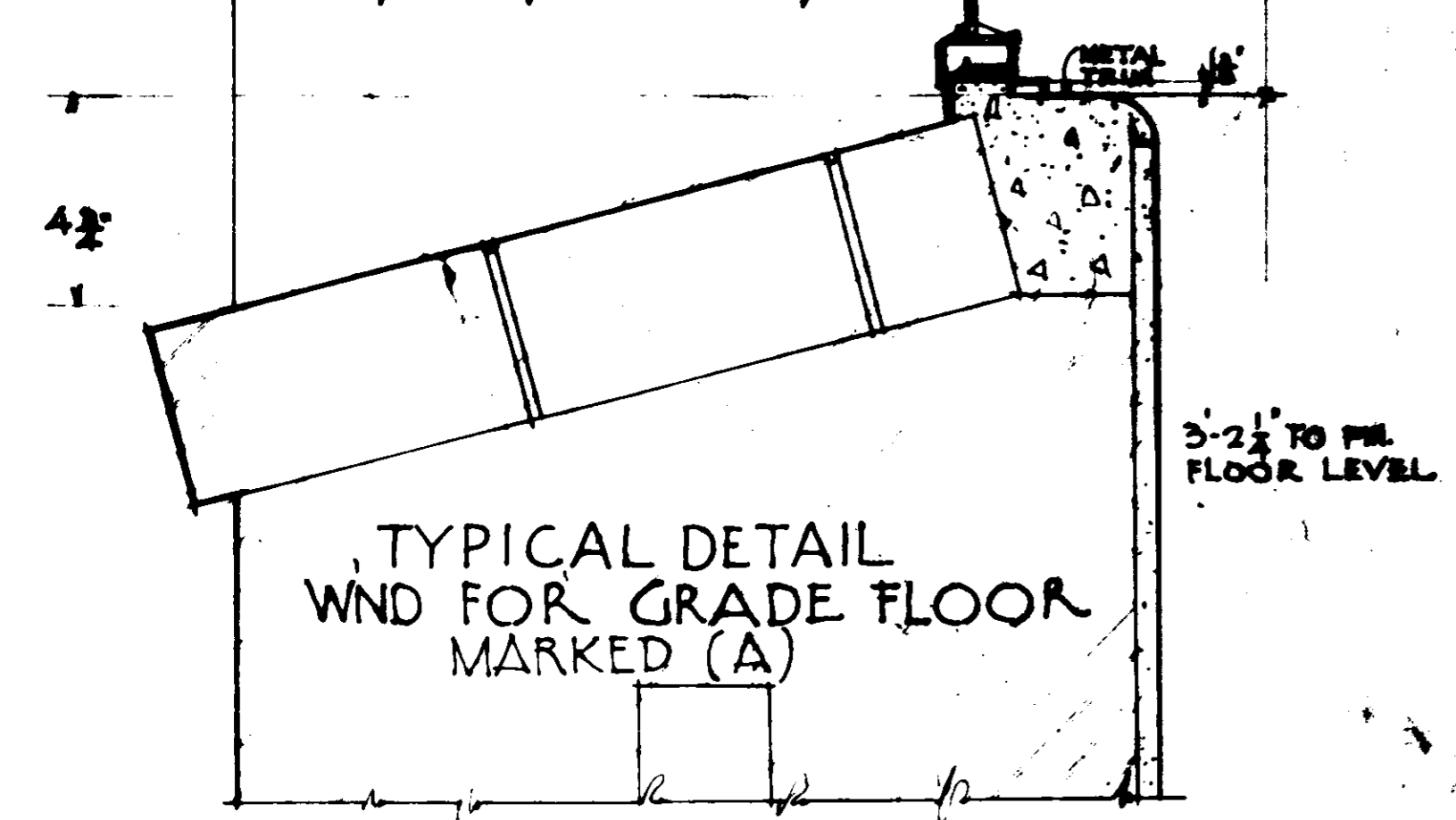
SECTION THRU HEAD FOR 1ST STORY WINDOWS MARKED (D) JAMB & SILL AS FOR WINDS MARKED (A)



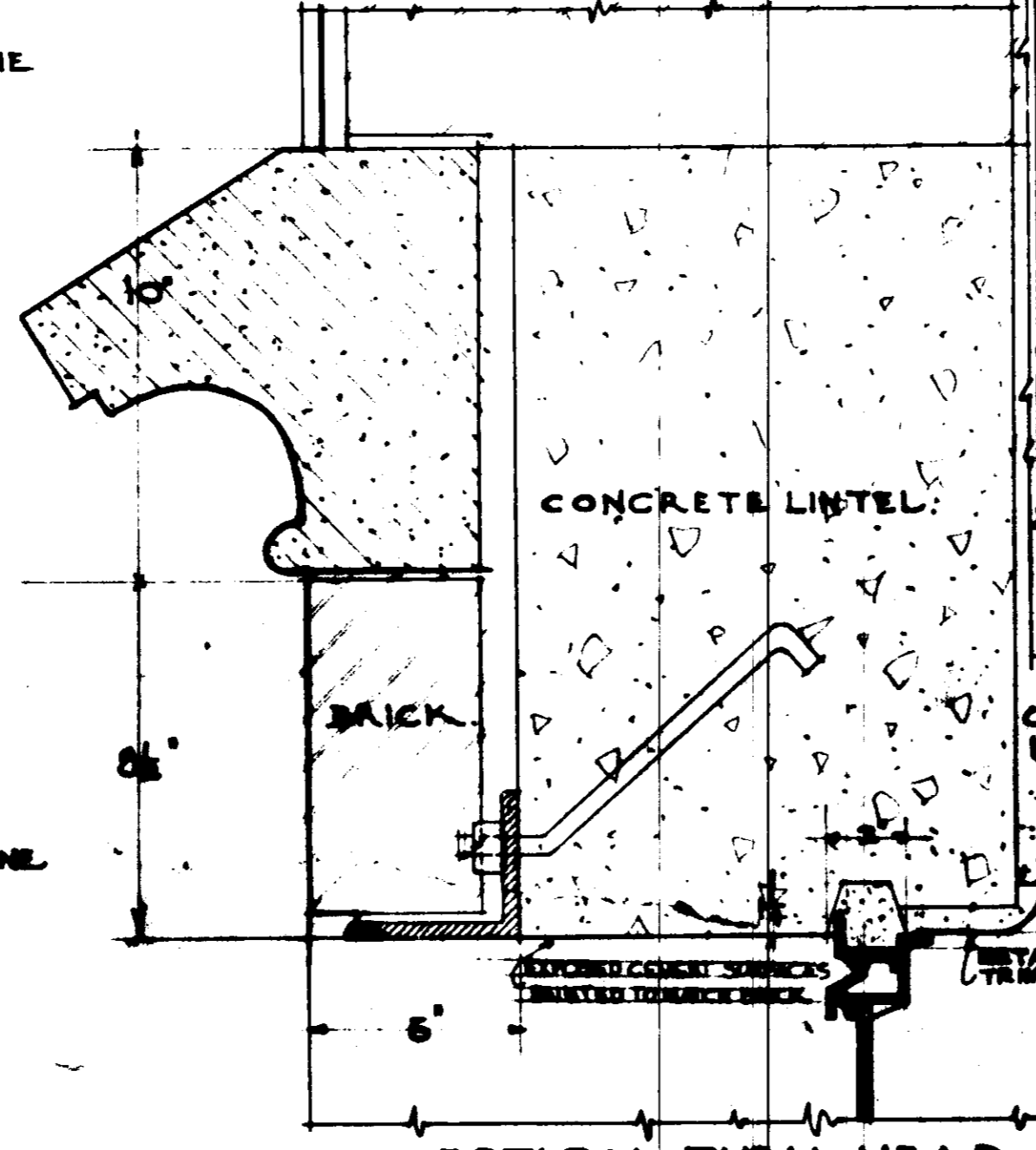
SECTION THRU HEAD



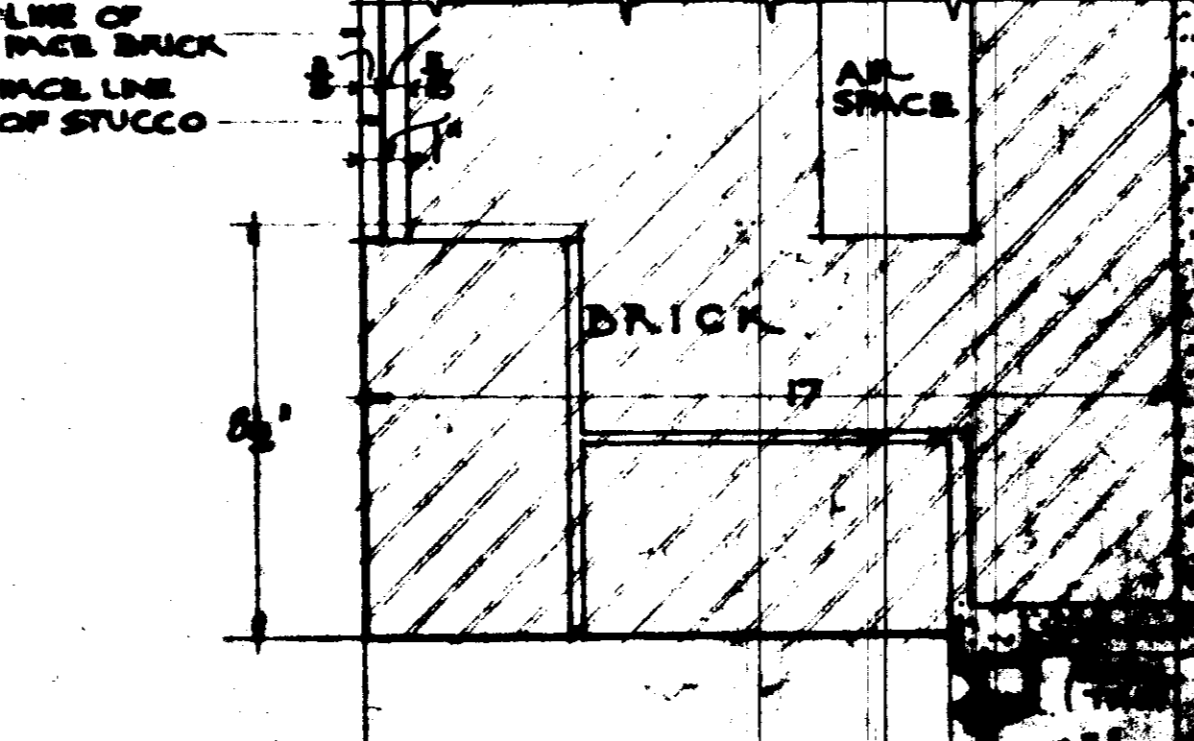
JAMB SECTION



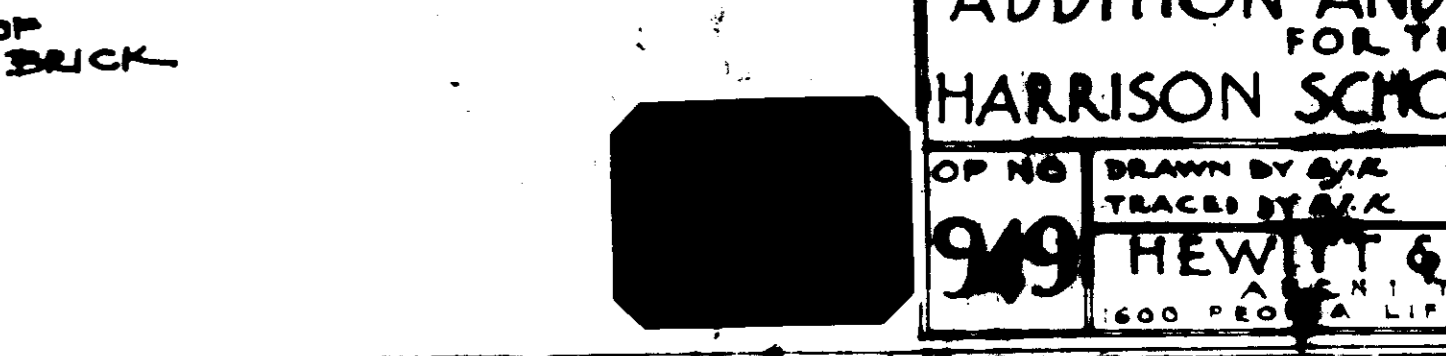
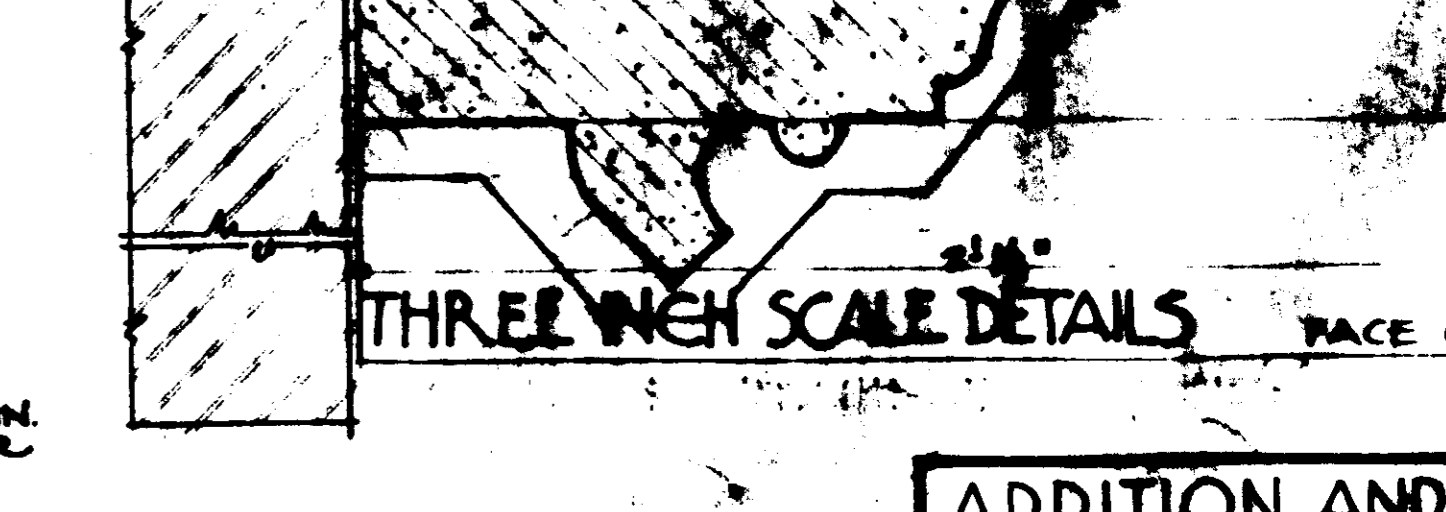
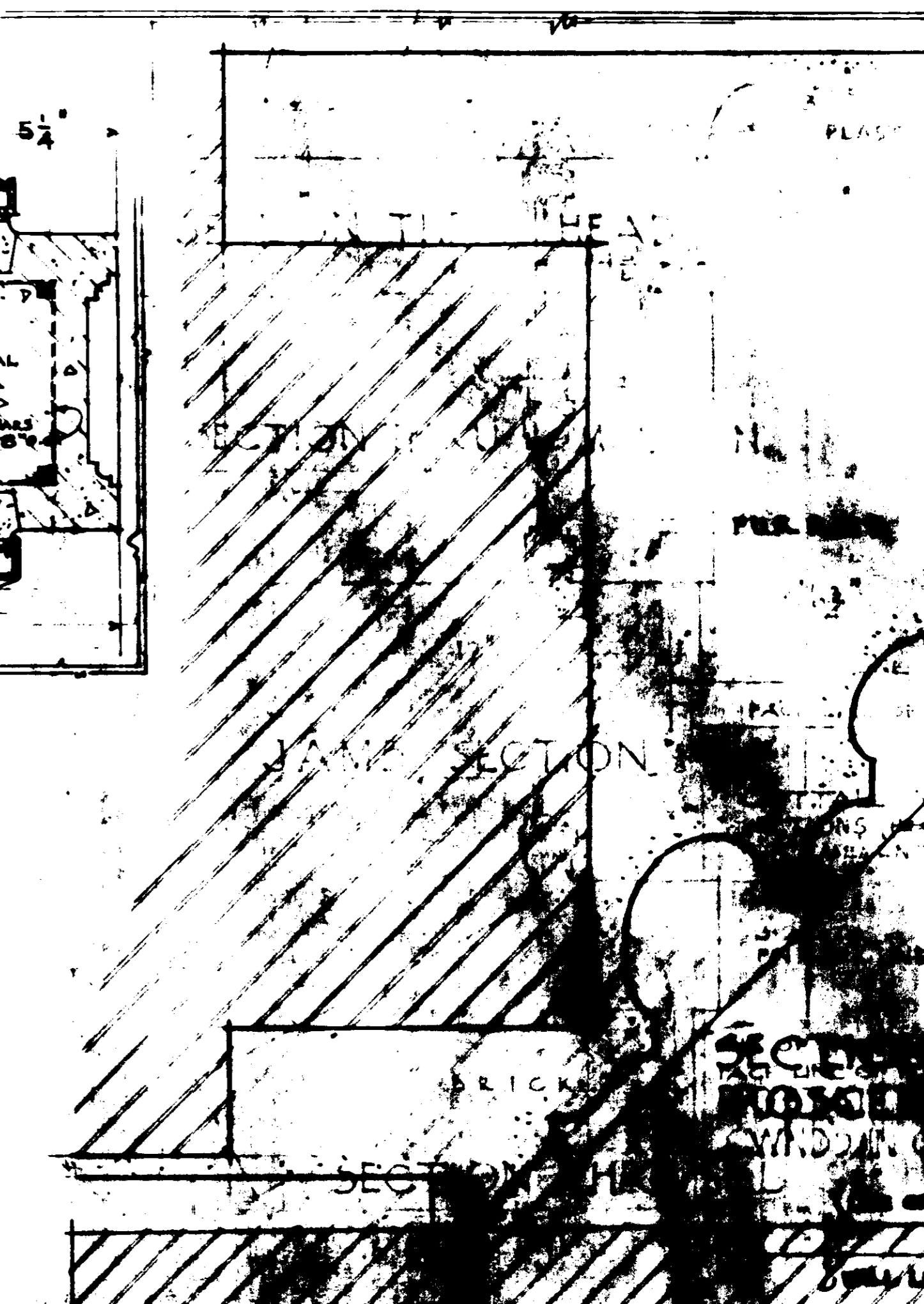
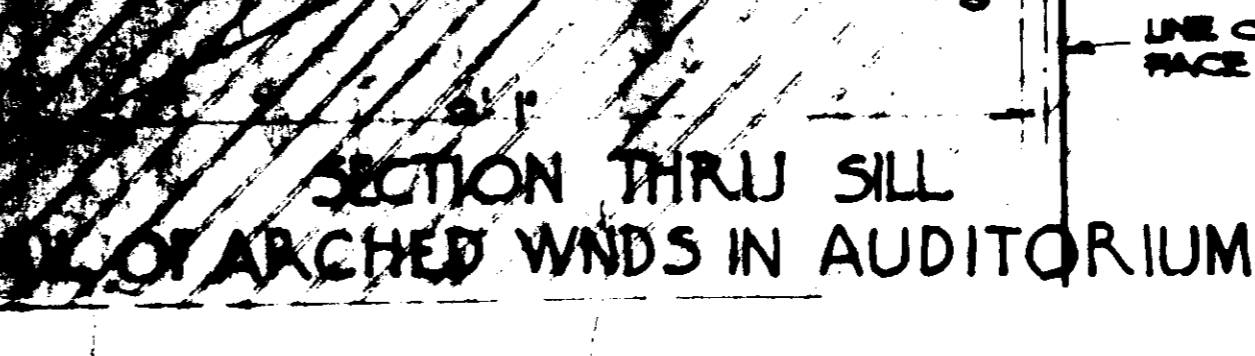
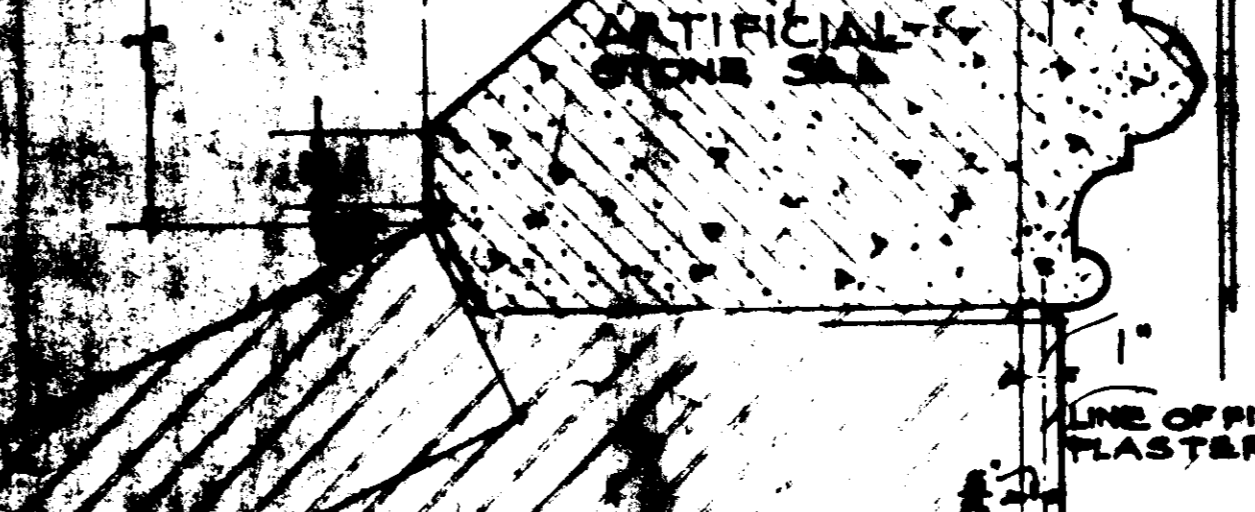
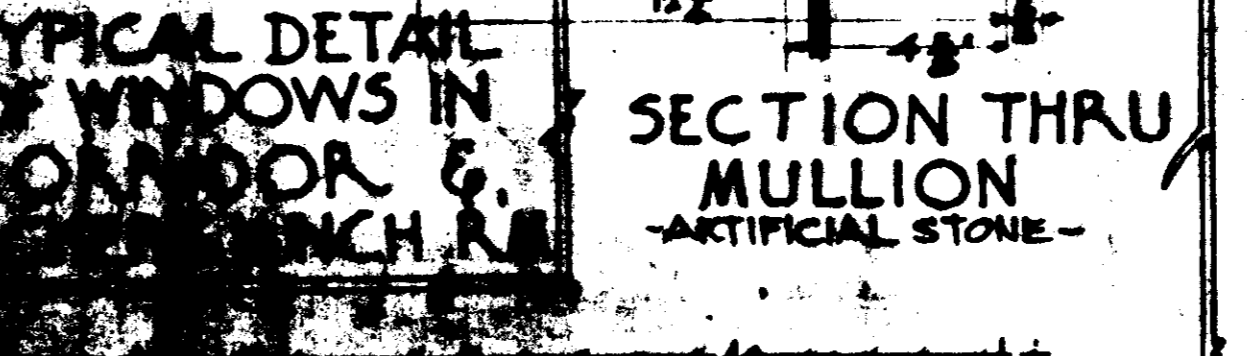
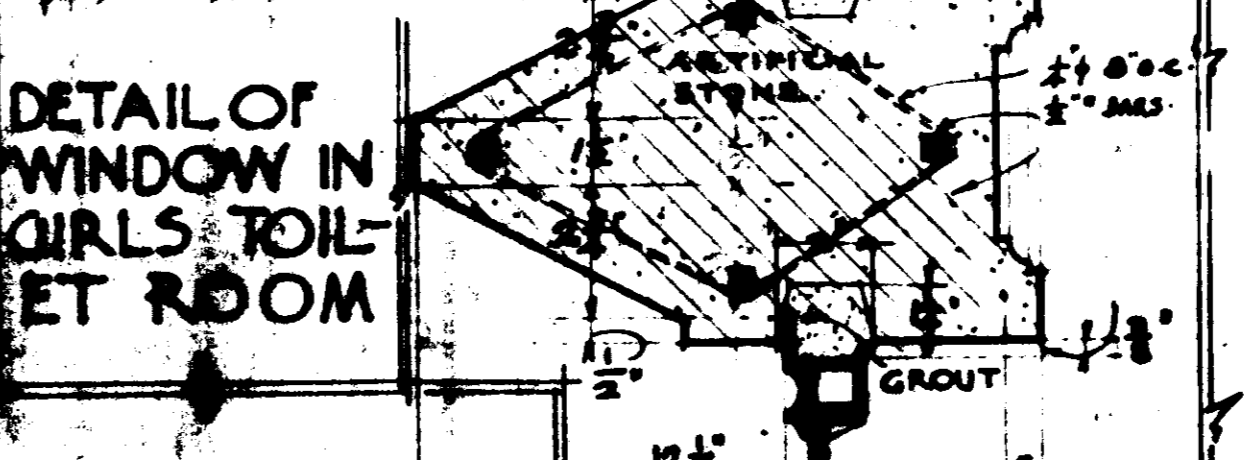
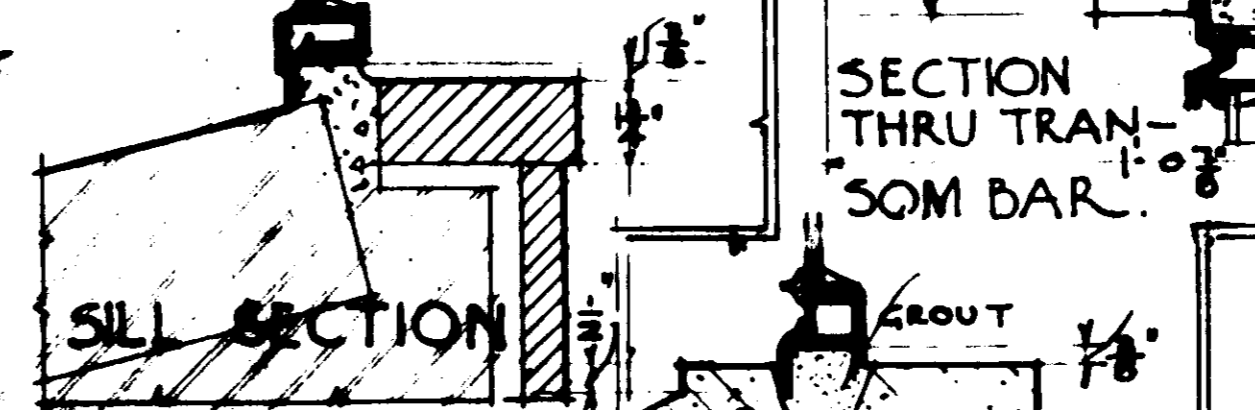
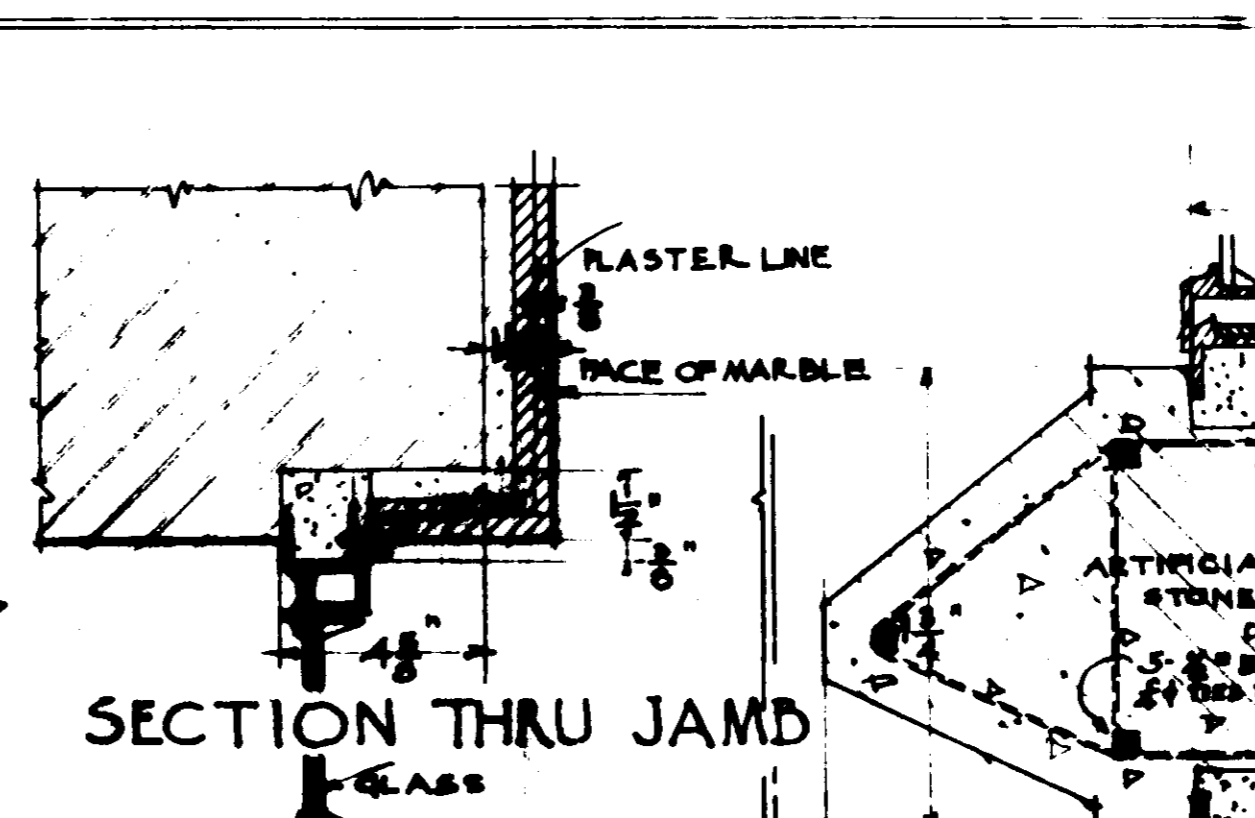
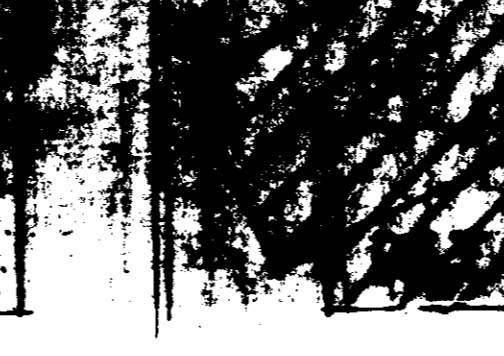
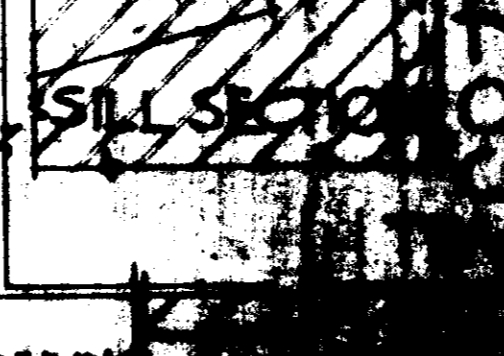
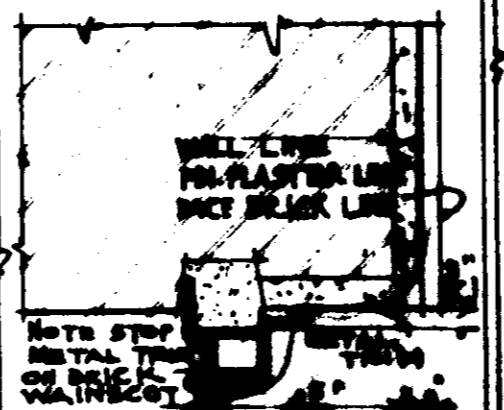
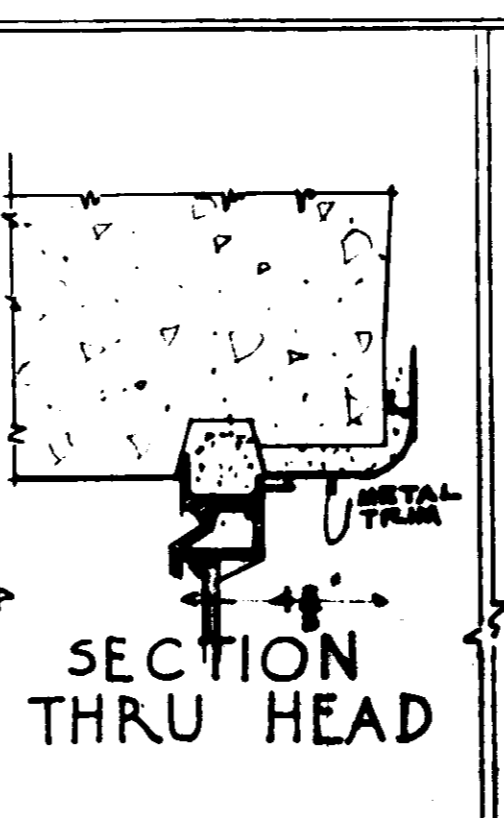
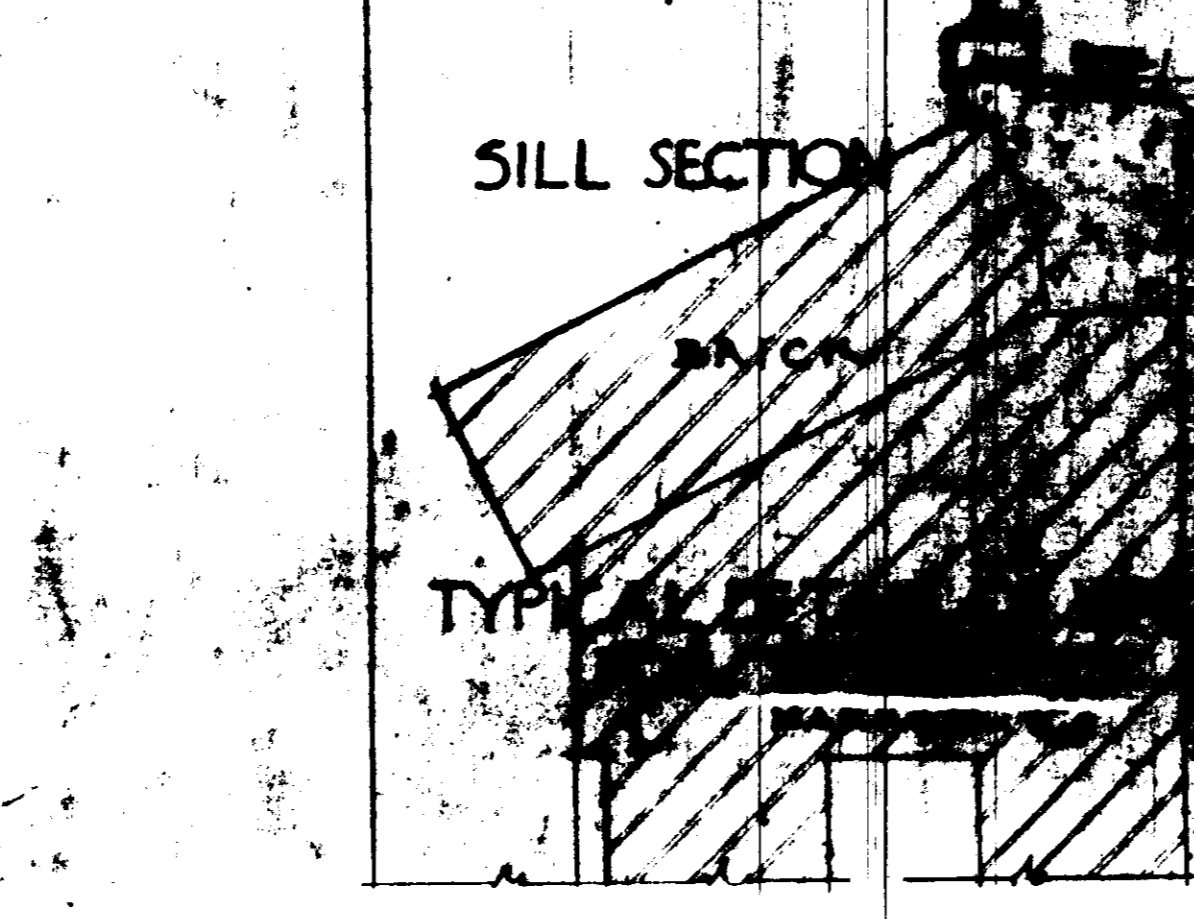
SECTION THRU COPING



SECTION THRU HEAD



JAMB SECTION



THREE INCH SCALE DETAILS

ADDITION AND
FOR THE
HARRISON SCHO
OP NO. DRAWN BY S.A. CH
TRACED BY S.A. CH
949 HEWITT & E
1600 PEO
A LIFE

DRAWING NUMBER

DRAWING NUMBER

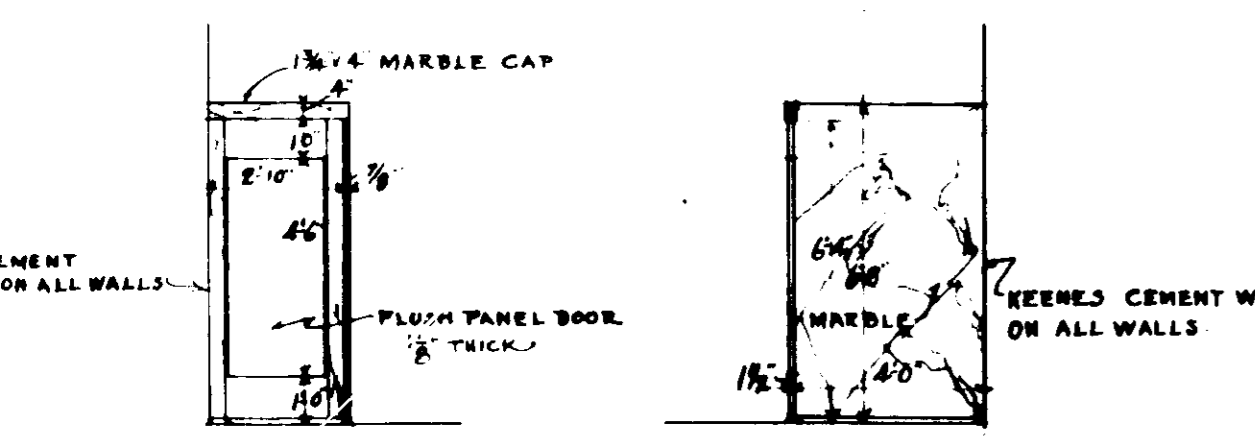
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DRAWING NUMBER

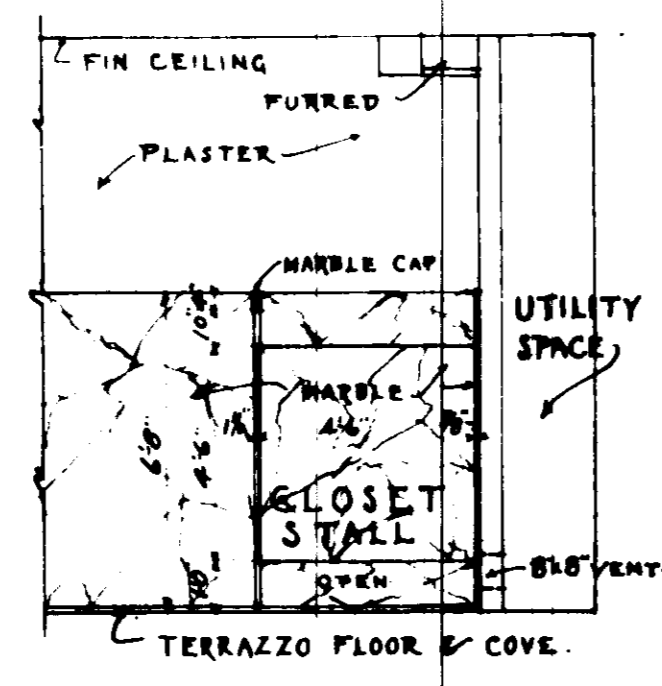
DRAWING NUMBER II

01.19-8-20-21 BLUL
Room 1 File Cab. #1
Elevations

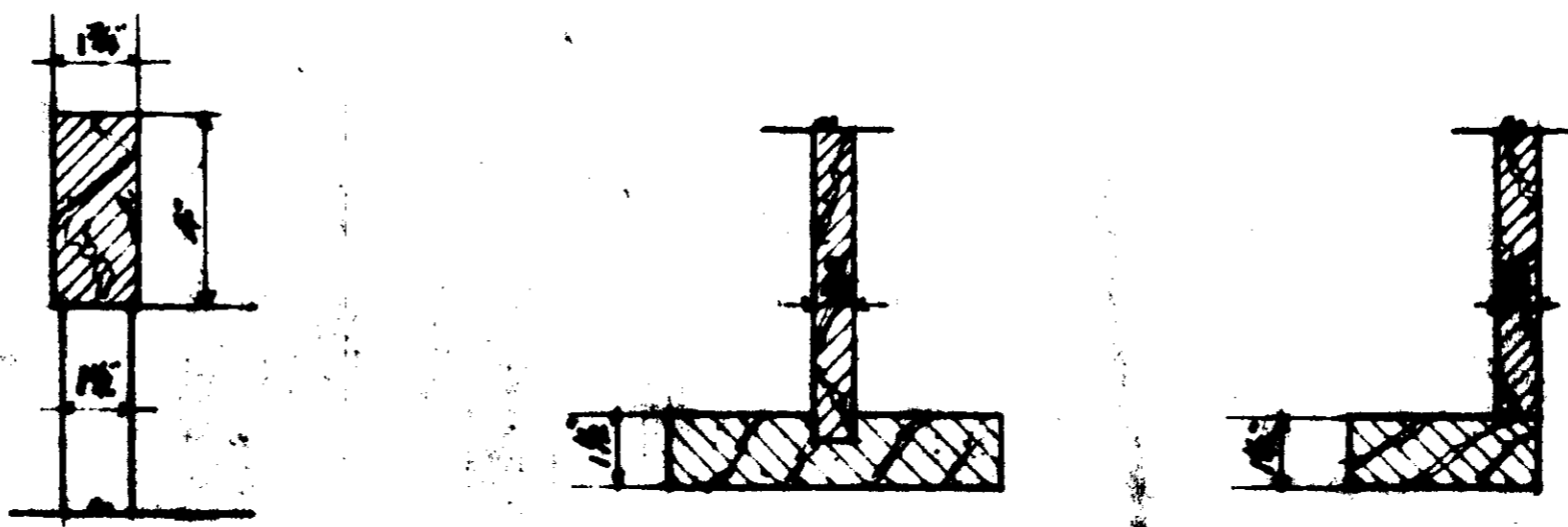
Harrison
Elevations
Hewitt-Emerson 8-20-21
SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 8553



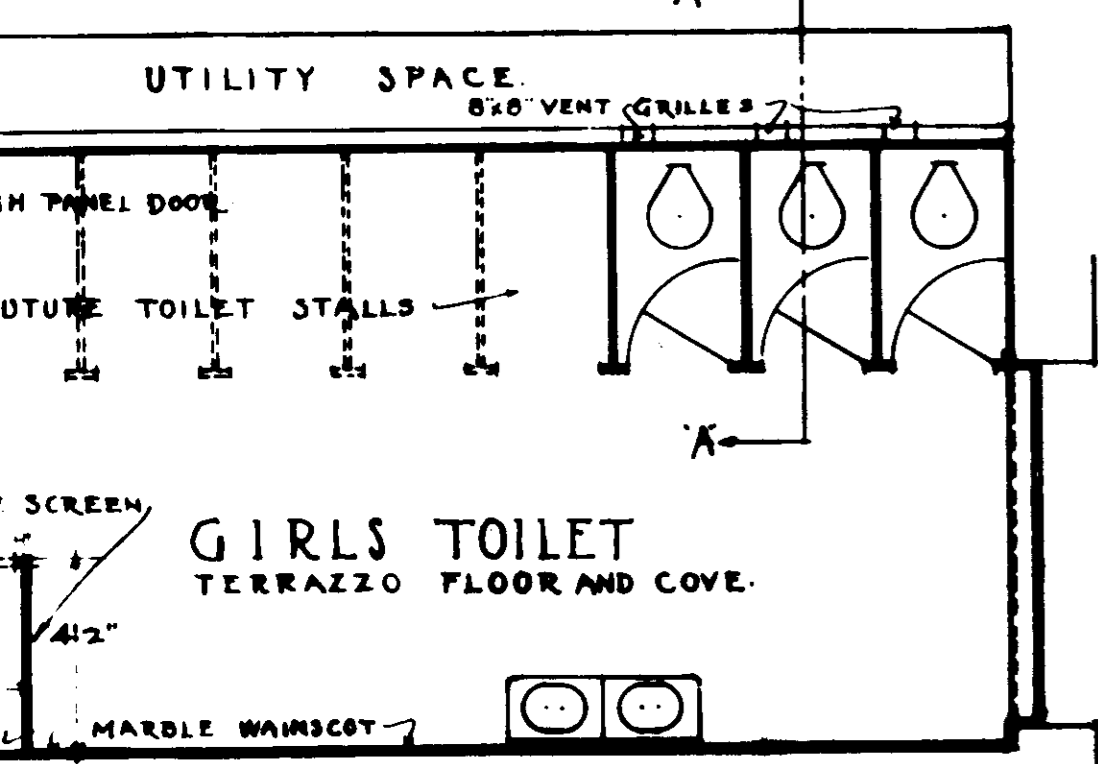
CROSS SECTION LONGITUDINAL SECTION
DETAILS OF STALLS IN TOILETS N^o III & 210.



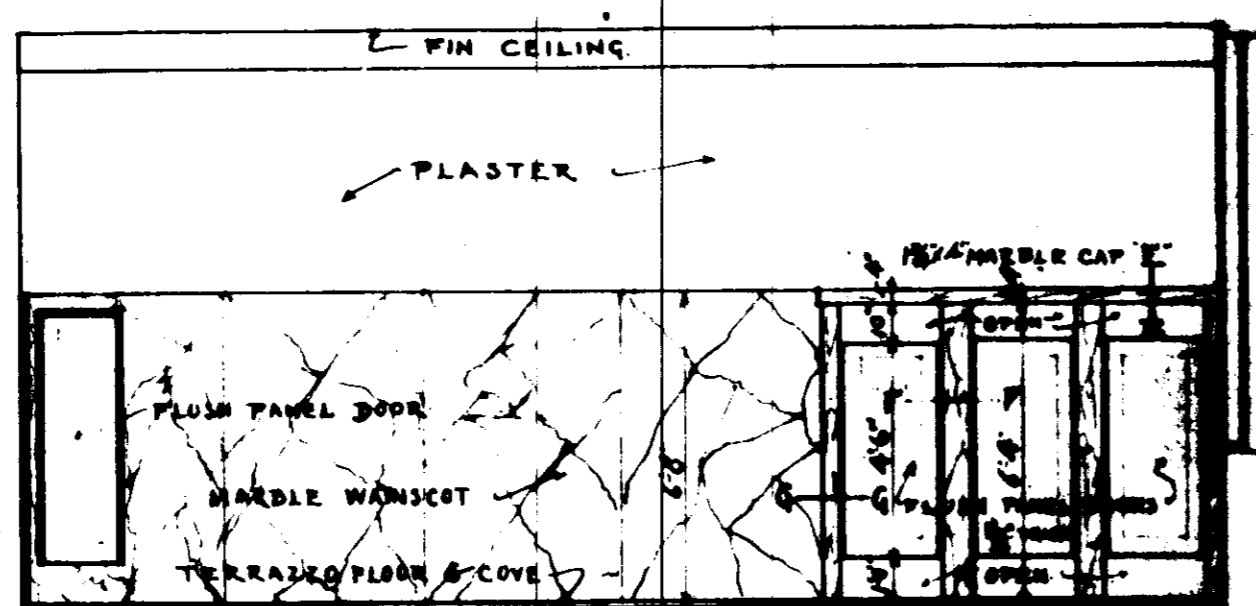
SECTION 'A-A'



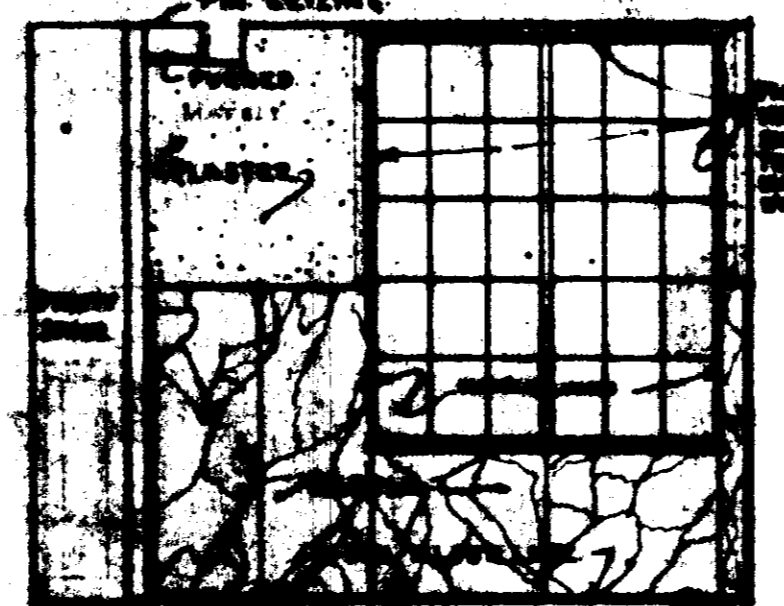
DETAIL AT 'E-E' DETAIL AT 'F-F' DETAIL AT 'G-G' DETAIL AT 'H-H'
MARBLE DETAILS
SCALE 3" = 1 FOOT.



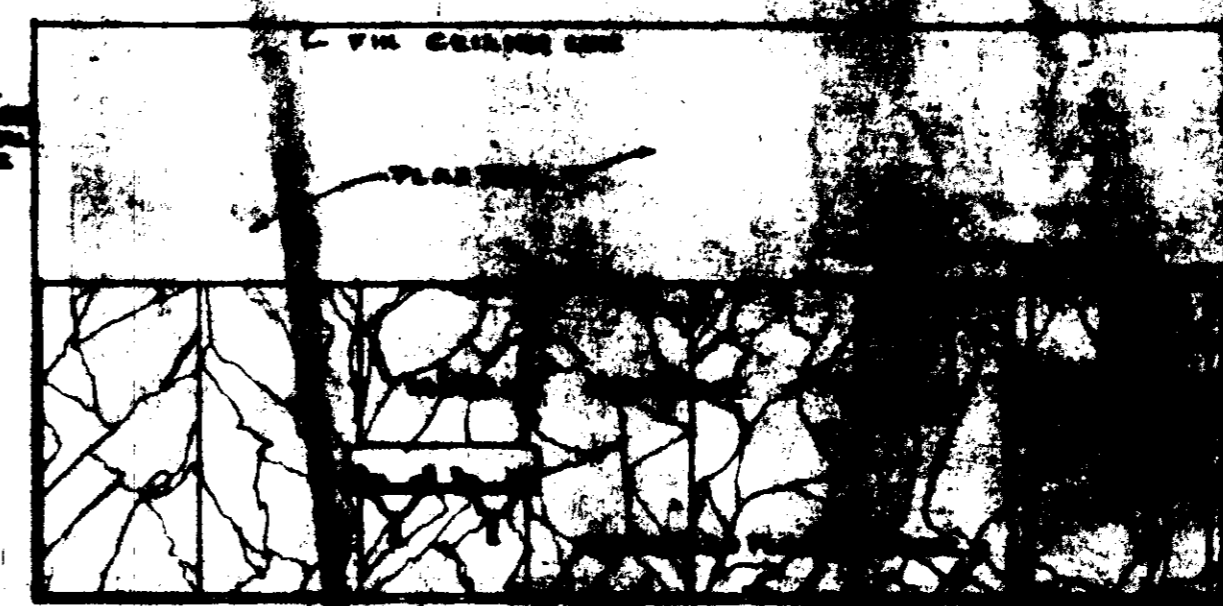
TYPICAL PLAN



SOUTH ELEVATION



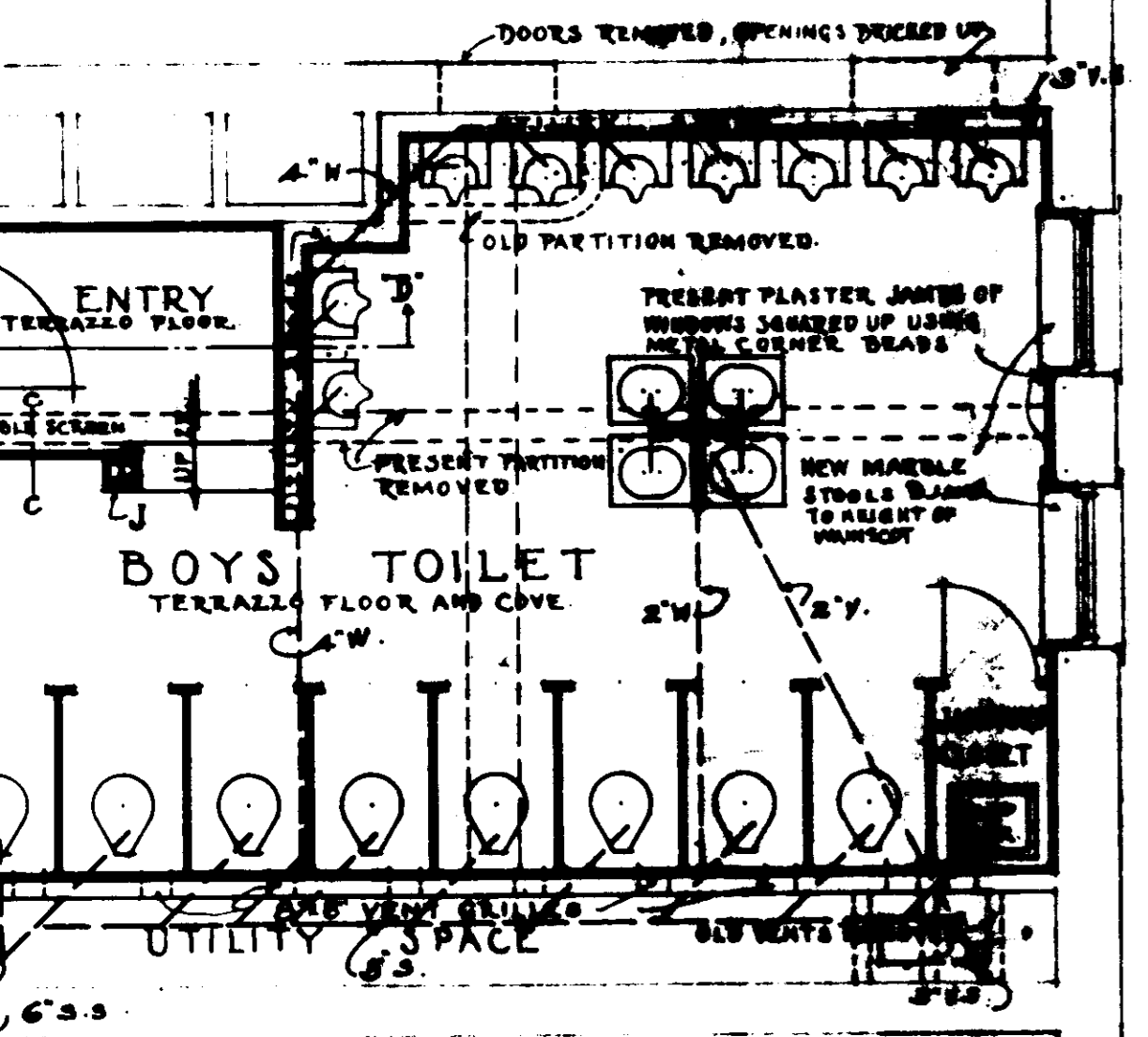
WEST ELEVATION



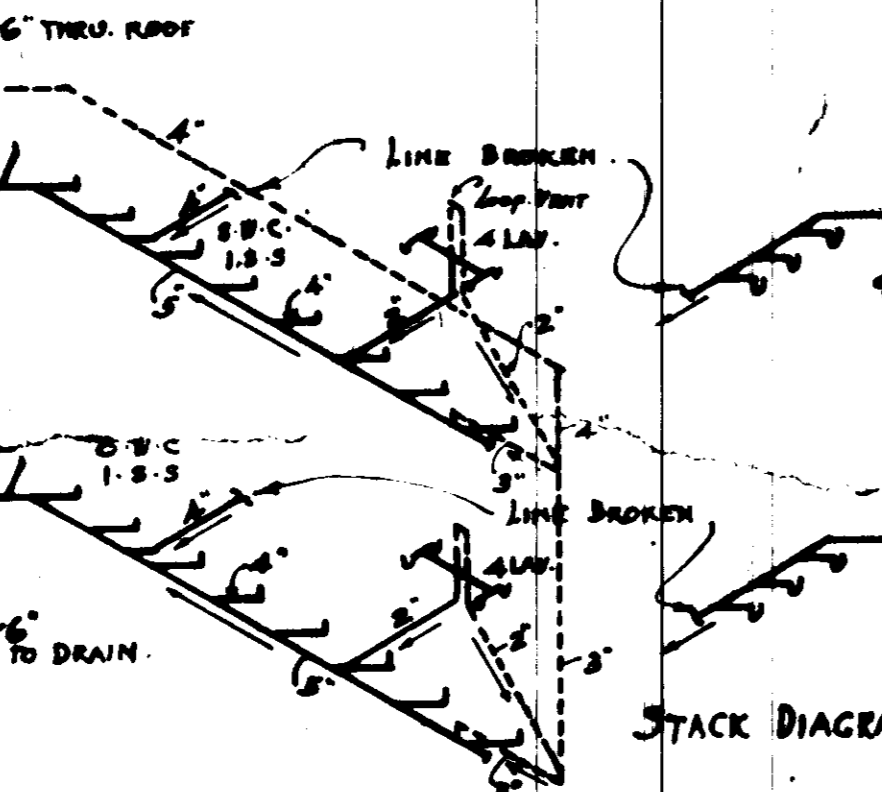
NORTH ELEVATION



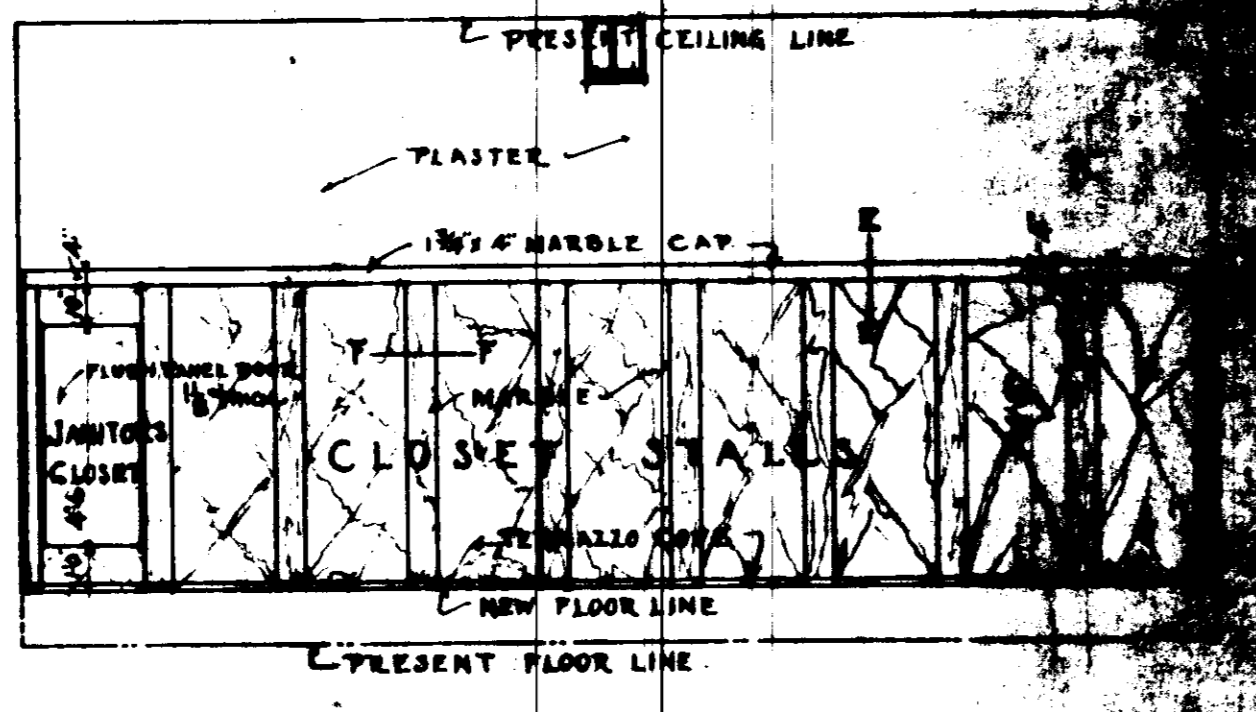
EAST ELEVATION



TYPICAL PLAN (15 / 20 FLOORS)



DETAIL OF TOILET ROOMS - NEW BUILDING
SCALE 3" = 1 FOOT.



EAST ELEVATION



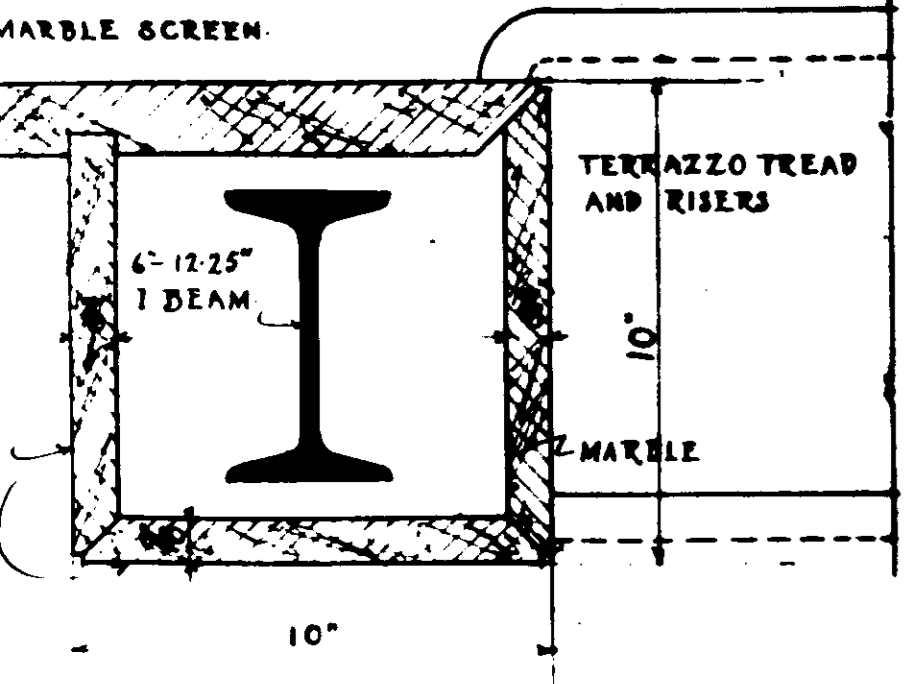
WEST ELEVATION



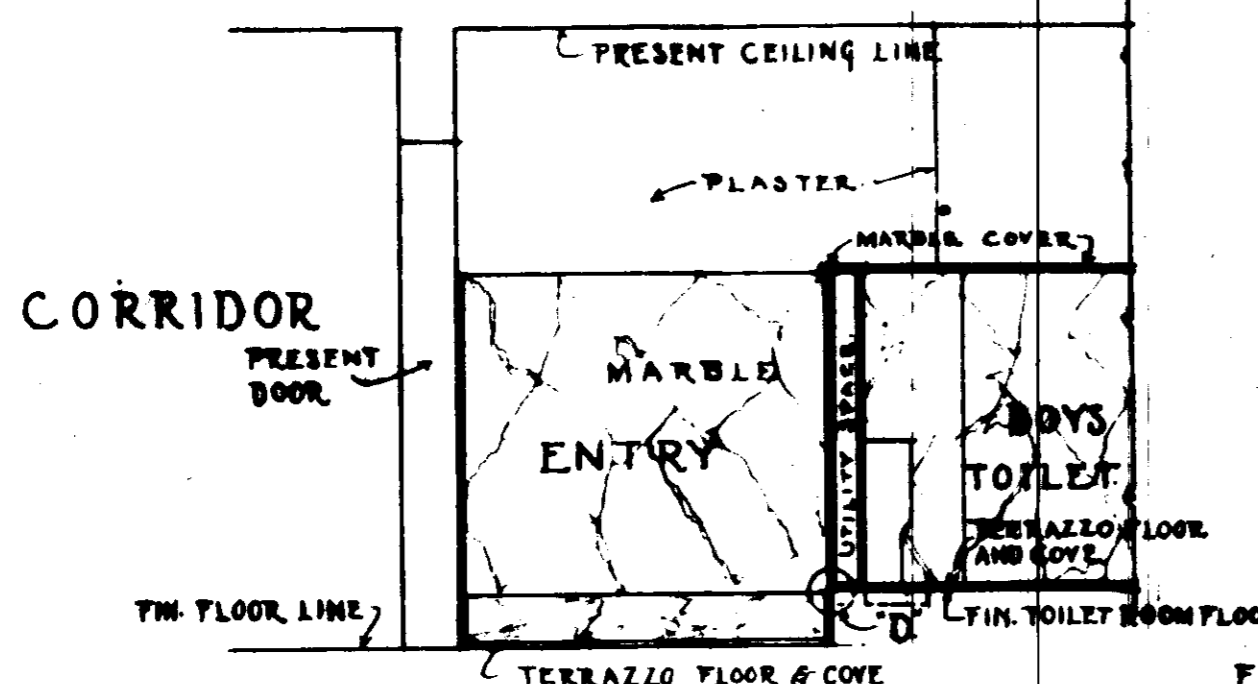
SOUTH ELEVATION



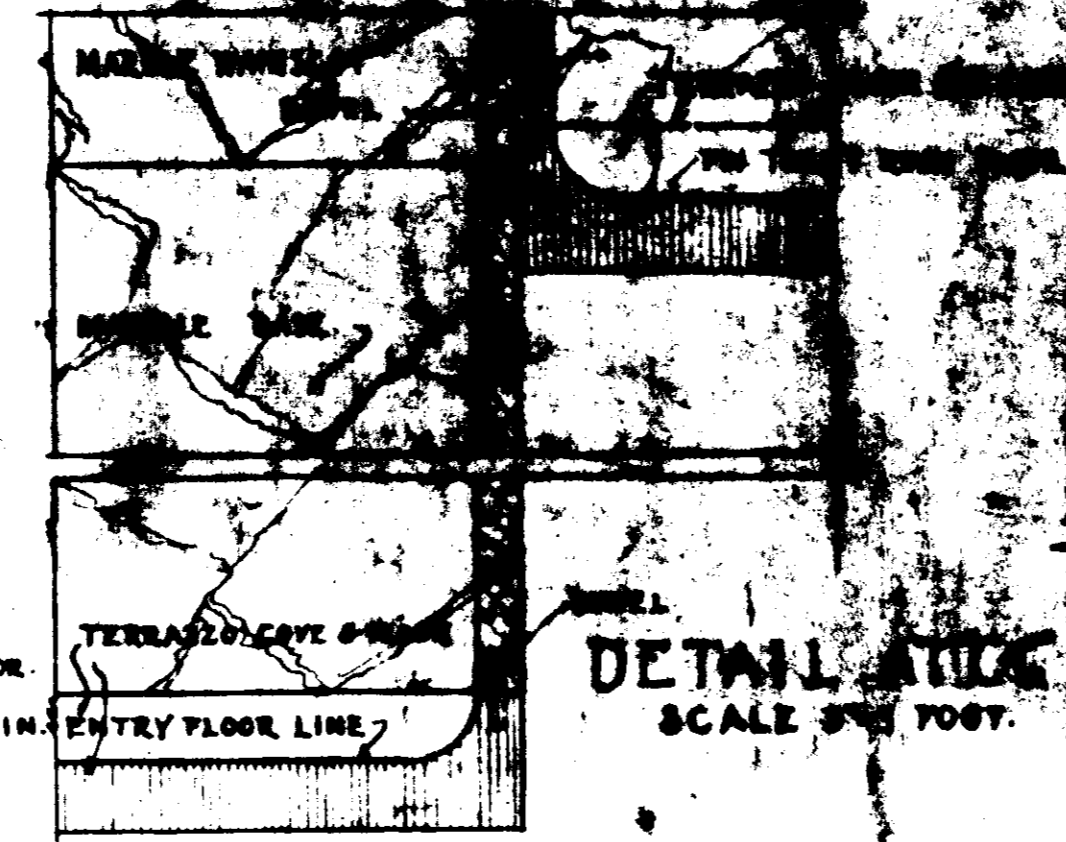
NORTH ELEVATION



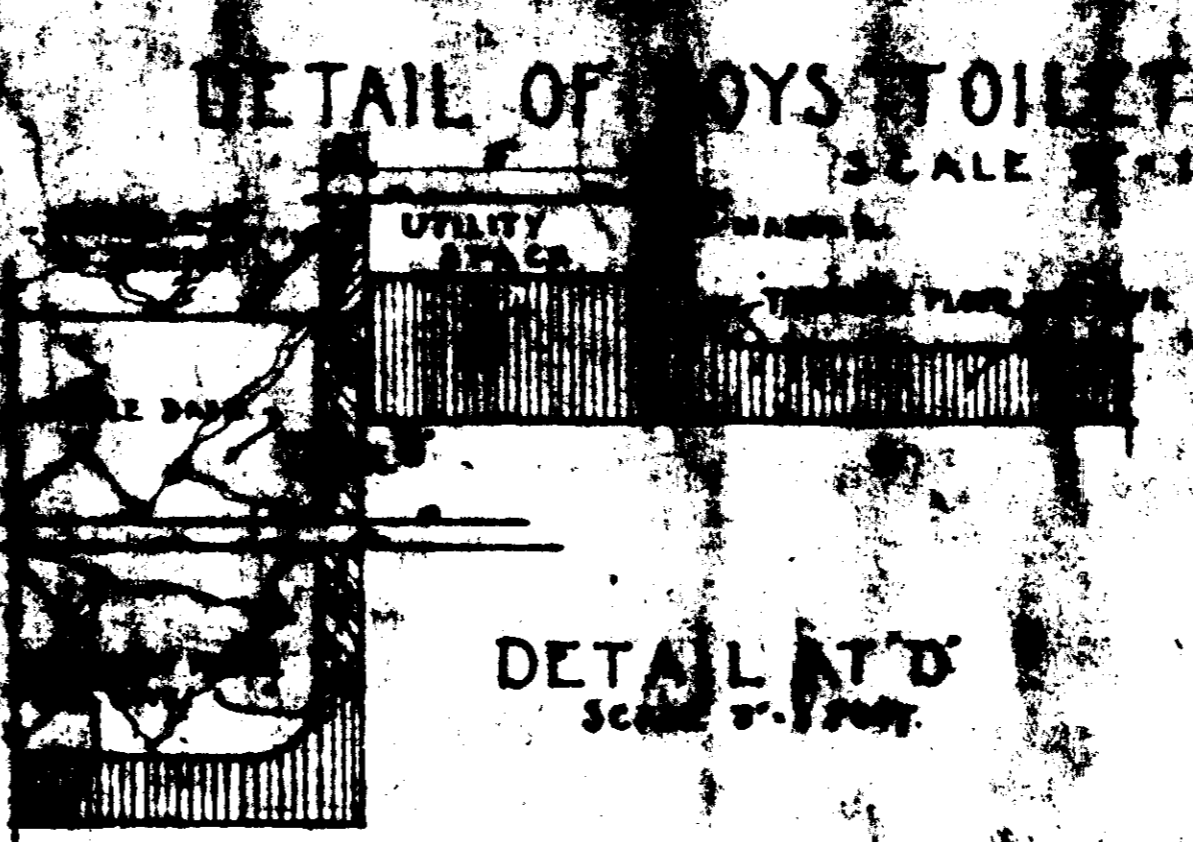
DETAIL AT 'J'
SCALE 3" = 1 FOOT



SECTION 'B-B'



DETAIL AT 'K'
SCALE 3" = 1 FOOT.



DETAIL AT 'D'
SCALE 3" = 1 FOOT.

ADDITION AND ALTERATION
FOR THE
HARRISON SCHOOL FOR THE
BLIND
SP NO. 949
HEWITT-EMERSON
1100 VICTORIA LANE
PICKERILL, ILL. 60131

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER 16

Harrison
Second Floor

Hecht Emerson 8-20-21

SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REDUCED BY PART NUMBER 8553

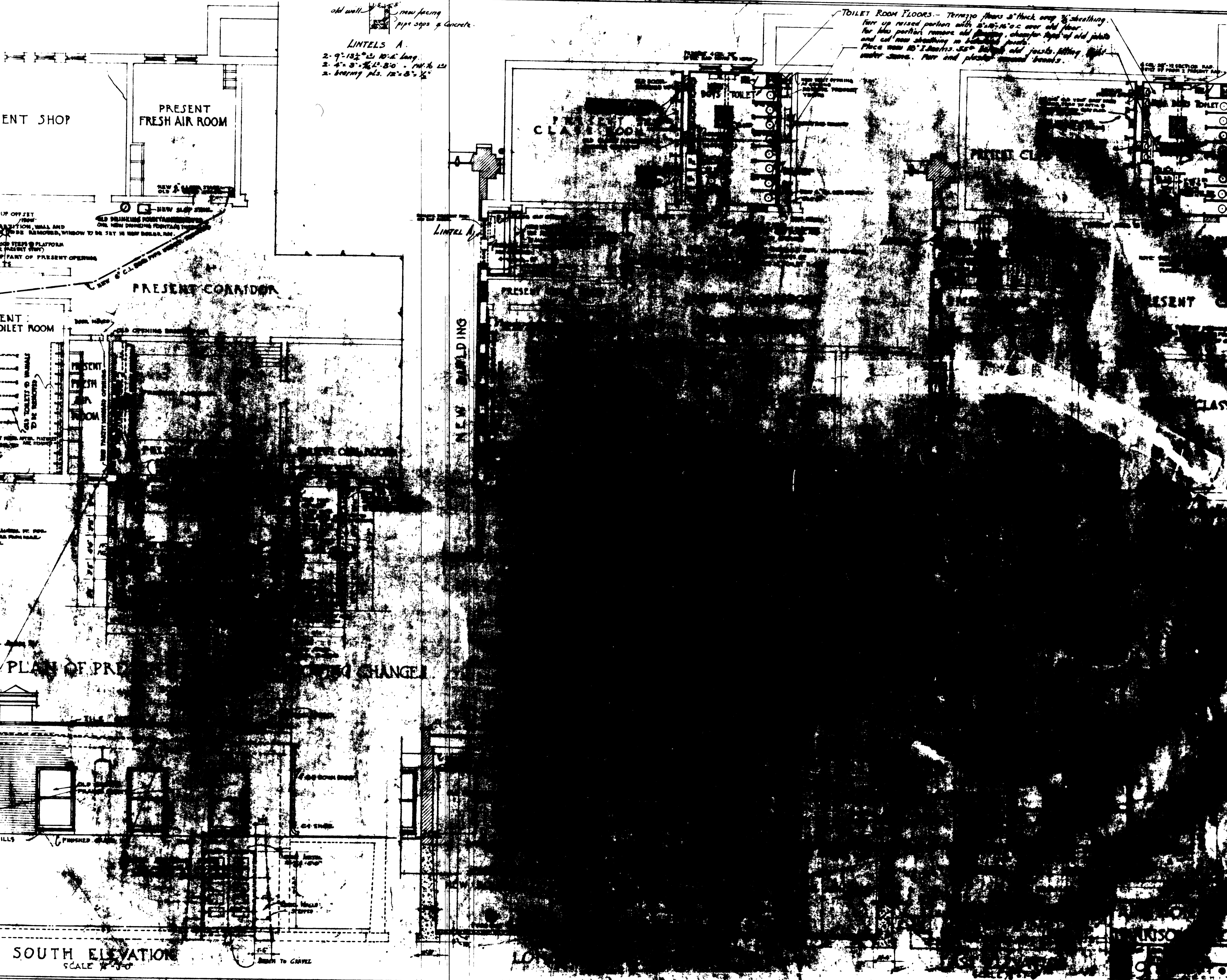
01 19-B-20-21 BLUL
Room 1 File Cab #1
Second Floor

SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REDUCED BY PART NUMBER 8553

old wall
new facing
pipe sops & concrete

LINTELS A.
2- 9'-18 1/2" x 10'-6" long
2- 4'-3" x 1'-8" x 8" - 1/2" dia
2- bearing pls. 12'-8" x 1/2"

TOILET ROOM FLOORS - Terazzo floors 3" thick over 3/4" sheathing.
Tear up raised portion with 2"x2"x6" o.c. over old floor
for new portion, remove old flooring, chamfer top of old joists
and cut new sheathing to finished finish.
Place new 10" I-beams 55" below old joists, filling with
steel studs. Floor and plaster around beams.



SOUTH ELEVATION
SCALE 1/4" = 1'-0"

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER 15

01-19-8-20-21 BLUL
Room 1 File Cab. # 1
Side Entrance

Harrison
Side Entrance
8-20-21

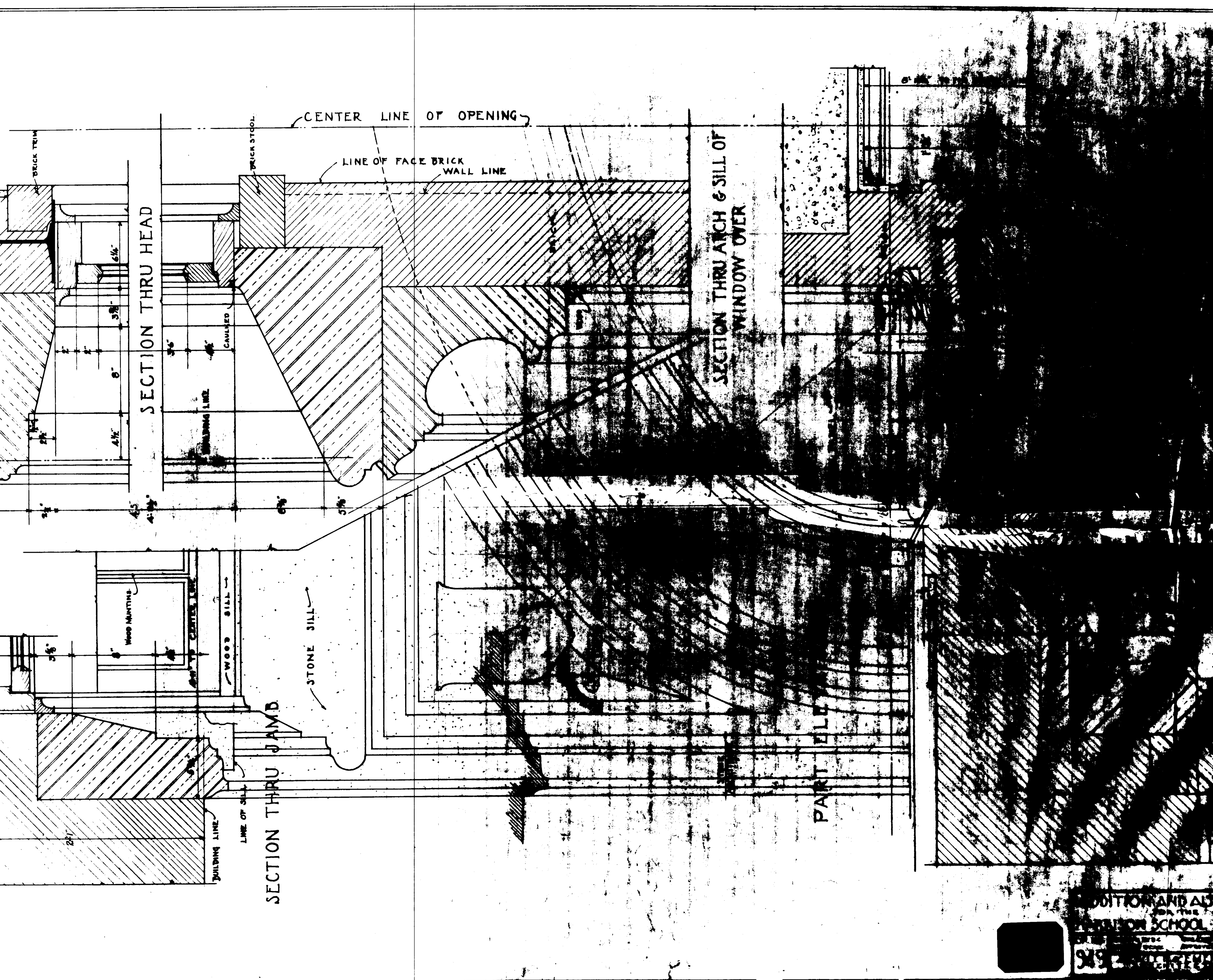
SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 10557
POSITION EDGE OF PRINT ON THIS LINE

SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 10557
POSITION EDGE OF PRINT ON THIS LINE

SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 10557
POSITION EDGE OF PRINT ON THIS LINE

SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 10557
POSITION EDGE OF PRINT ON THIS LINE

SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 10557
POSITION EDGE OF PRINT ON THIS LINE



ADDITIONAL AND ALL
FOR THE
HARRISON SCHOOL
ON THE
APPROVED
DATE

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER E4

DRAWING NUMBER

SAFDO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

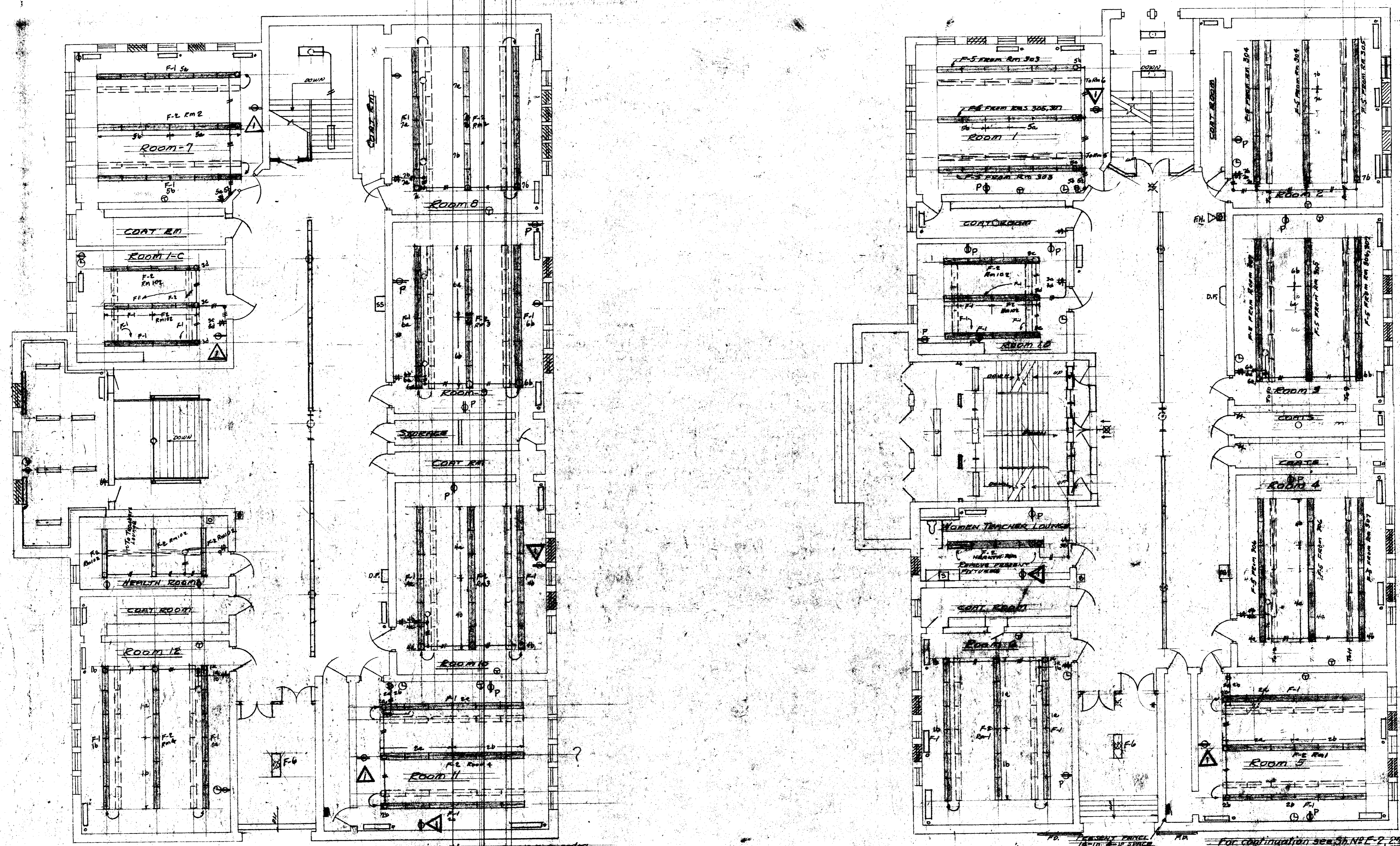
SAFDO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

SAFDO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

01.19-1-2-73 BLUL
Room 1 File Cab # 1
First and Second Floor
SAFDO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

Harrison
First + Second Floor
G. L. Tinsman
1-2-73
SAFDO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553

SAFDO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6553



For continuation see Sh No E-3, 3rd Floor.

For continuation see Sh No E-2, 2nd Floor.

SECOND FLOOR
1/8" = 1'-0"

FIRST FLOOR
1/8" = 1'-0"

S. ALAN BAIRD
CONSULTING ENGINEER

JOB NO. 72-11	ALTERATION TO HARRISON SCHOOL FOR PEORIA PUBLIC SCHOOLS	SHEET NO.
DATE Jan 2, 1973	SCHOOL DISTRICT NO. 150 PEORIA, ILLINOIS	
GORDON L. TINSMAN A.I.A. ARCHITECT 1425 N. ROCK ISLAND AVE. PEORIA, ILLINOIS		

DRAWER 4

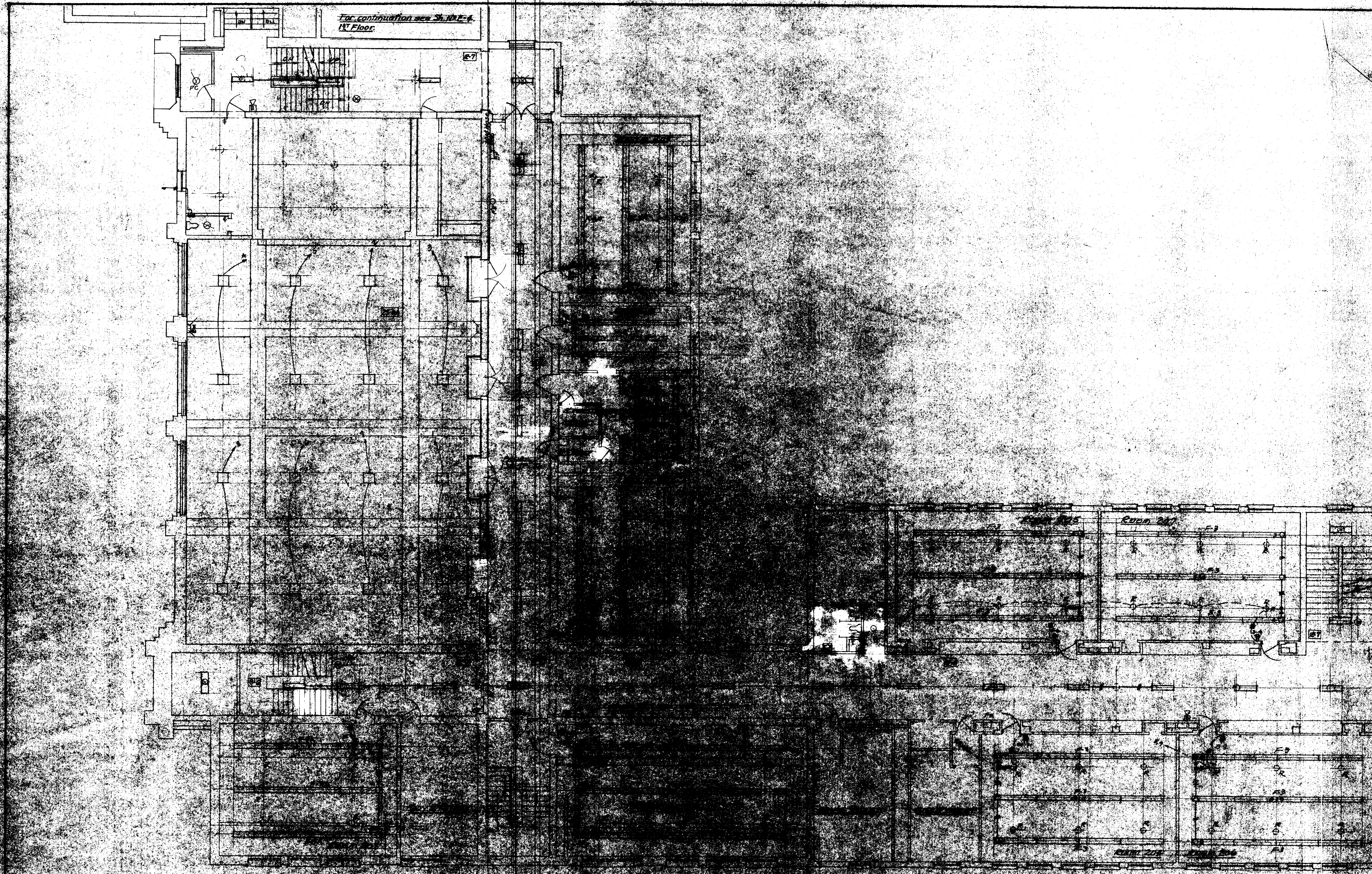
SARCO PRODUCTS • NEW HOPE, MINNESOTA
RE-DESIGNED BY PART NUMBER 6553
POSITION EDGE OF PRINT ON THIS LINE

SARCO PRODUCTS • NEW HOPE, MINNESOTA
RE-DESIGNED BY PART NUMBER 6553
POSITION EDGE OF PRINT ON THIS LINE

SARCO PRODUCTS • NEW HOPE, MINNESOTA
RE-DESIGNED BY PART NUMBER 6553
POSITION EDGE OF PRINT ON THIS LINE

01.19-1-2-73 BLUL
Room 1 File Cab. # 1
Second Floor Plan
SARCO PRODUCTS • NEW HOPE, MINNESOTA
RE-DESIGNED BY PART NUMBER 6553
POSITION EDGE OF PRINT ON THIS LINE

SARCO PRODUCTS • NEW HOPE, MINNESOTA
RE-DESIGNED BY PART NUMBER 6553
POSITION EDGE OF PRINT ON THIS LINE



For continuation see Sheet 4
1st Floor

Cabin 201

Cabin 202

Cabin 201

Cabin 202

WELCH

ARCHITECT

SHEET NO. 12-11 DATE: 12-73	ALTERATION TO HARRISON SCHOOL FOR PEORIA PUBLIC SCHOOLS SCHOOL DISTRICT NO. 100 PEORIA, ILLINOIS GORDON L. THORNTON, A.A. ARCHITECT 1405 N. ROCK ISLAND AVE. PEORIA, ILLINOIS
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APPENDIX C

Photographic Log of Items to be Salvaged

Appendix C- Photographs of Items to be Salvaged

Photo No. 1

Description:

"19 Harrison School 01" limestone name above the front door.



Photo No. 2

Description:

Three limestone pediments immediately above that limestone "nameplate"..



Appendix C- Photographs of Items to be Salvaged

Photo No. 3

Description:

Blue cloth stage curtains and top piece in one of the auditoria, with the letter "H".



Photo No. 4

Description:

Limestone archways on north side of the property.



Appendix C- Photographs of Items to be Salvaged

Photo No. 5

Description:

Moldings on south facing roof.



Photo No. 6

Description:

Limestone archway at east entrance.



Appendix C- Photographs of Items to be Salvaged

Photo No. 6

Description:

Third floor auditorium doors.



Photo No. 7

Description:

Third floor auditorium wooden column.

