



# PROJECT MANUAL

## ASBESTOS ABATEMENT WORK FOR 2021 RENOVATIONS

**Krug Elementary School  
240 Melrose Avenue  
Aurora, Illinois 60505**

**And**

**Waldo Middle School  
56 Jackson Street  
Aurora, Illinois 60505**

**For**

**East Aurora School District 131  
417 5<sup>th</sup> Street  
Aurora, Illinois 60505**

### **Prepared By:**

**TEM Environmental, Inc.  
174 North Brandon Drive  
Glendale Heights, Illinois 60139**

**Date: October 22, 2020**

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BIDDING AND CONTRACT REQUIREMENTS  
Document 00030 - Advertisement for Bids

The Board of Education of East Aurora School District 131 ("Board"), will receive sealed bids for asbestos abatement work for the 2021 Renovation Projects. The following two Bid Packages are being solicited:

- **Bid Package 1, Krug Elementary School Asbestos Abatement**
- **Bid Package 2, Waldo Middle School Asbestos Abatement**

Bids shall be submitted in a sealed opaque envelope no later than November 4, 2020 at 10:00 am.

Bid Packages shall be delivered prior to the above date and time to East Aurora School District 131 Administrative Center located at 417 5th Street, Aurora, Illinois 60505. Facsimile and electronic bids will not be accepted. Bidders are responsible for ensuring timely delivery of their bids; no late bids will be accepted. Bids will be opened and read aloud at the East Aurora School District 131 Administrative Center located at 417 5th Street, Aurora, Illinois 60505 at the bid due date, and time.

A MANDATORY pre-bid meeting and walk-through will be held on October 26, 2020 starting at 1:00 pm. The meeting will start at the Main Entrance to Krug Elementary School, 240 Melrose Avenue, Aurora, Illinois 60505 and will proceed to Waldo Middle School. All contractors submitting bids for these projects SHALL attend the pre-bid meetings at both schools. The pre-bid meeting will also be attended by a representative of East Aurora School District 131.

Bid security in the form of a bid bond, certified check, or cash in an amount equal to 5 percent of the base bid amount shall be submitted with the bid. The successful Contractor shall provide Labor and Material Bonds, and Performance Bonds for the work.

In accordance with the Prevailing Wage Act, all bidders shall guarantee that not less than the prevailing wage will be paid to laborers, workers and mechanics performing work under the contract.

The Board reserves the right to reject any and all bids, or any part thereof, and to waive any irregularities or technicalities in the bids.

Bidding documents and specifications may be obtained on or after October 22 , 2020, by contacting TEM Environmental, Inc. representative Steven B. Geneser ([Sgeneser@tem-inc.com](mailto:Sgeneser@tem-inc.com)) or may be obtained from TEM Environmental, Inc.'s office located at 174 North Brandon Drive, Glendale Heights, Illinois 60139.



- C. The Owner reserves the right to waive any or all technicalities, irregularities or informalities.
- D. The Owner reserves the right to award multiple contracts for the work.

**1.03. DEFINITIONS**

- A. All definitions set forth in the General Conditions and Supplementary Conditions of the Contract for Construction are applicable to these Instructions to Bidders.
- B. Addenda are written or graphic instruments issued prior to the execution of the Contract which modify or interpret the Contract Documents, including Drawings and Specifications, by additions, clarifications, or corrections. Addenda will become part of the Contract Documents when the Contract is executed.
  - 1. Addenda will be issued by electronic mail, FAX transmittal, direct mail or United Parcel delivery. Bidders are to consider a FAX transmittal addendum as a binding addition to the Contract Documents.
  - 2. It is the bidder's responsibility to ascertain from the Asbestos Project Designer that they have received all addenda issued to the Contract Documents prior to submitting their bid.

**1.04. DOCUMENTS**

Bid documents and specifications may be obtained any time on or after October 22, 2020, by contacting TEM Environmental, Inc. representative Steven B. Geneser ([SGeneser@tem-inc.com](mailto:SGeneser@tem-inc.com)).

**1.05. EXAMINATION OF DOCUMENTS AND SITE AND MANDATORY PRE-BID MEETING**

- A. Bidders are responsible for examining all bid documents and specifications and for examining the site to become familiar with and make allowance for any conditions which may affect the work. Bidders will not be given extra payments for conditions which can be determined by examining the site and documents.
- B. A mandatory pre-bid meeting and walk-through will be held on October 26, 2020 at 1:00 pm. The meeting will start at the Main Entrance of Krug Elementary School, 240 Melrose Avenue, Aurora, Illinois 60505. Both schools will be toured as part of the pre-bid meeting.

**1.06. POST-BID QUALIFICATION**

- A. Any bidder may be required to submit supporting data to substantiate that such bidder is properly qualified to carry out the obligations of the Contract and to complete the Work contemplated therein.
- B. Bidders must have successfully performed a minimum of \$1,000,000 worth of asbestos abatement work on schools in the State of Illinois and provide evidence thereof to be eligible to bid.

**1.07. BID WITHDRAWAL**

- A. Any bidder may withdraw its bid prior to the scheduled closing time for receiving bids.
- B. All bidders shall hold their Bids open for a period of thirty (30) calendar days from the date of Bid Opening.

## **1.08. INTERPRETATION OF BIDDING DOCUMENTS**

- A. Submit all questions regarding the bidding documents to the Asbestos Project Designer in writing. Replies will be issued to all bidders of record in the form of an Addendum. Questions received after 5:00 p.m. Central Time on October 29, 2020 will not be answered.

## **1.09. NON-SPECIFIED ITEMS**

- A. Approved Equal Items:

1. To obtain approval to use non-specified items, bidders must submit a written request by 5:00 p.m. Central Time on October 29, 2020; requests received after this time will NOT be considered.
2. Requests shall clearly describe the items for which approval is sought, including all data necessary to demonstrate acceptability.
3. If an item is acceptable, the Asbestos Project Designer will approve same in an Addendum issued to all bidders of record.

- B. Substitutions:

1. Substitutions for the items specified may be made by the bidder only by submitting proposed substitutions on the Substitution Sheet provided.
2. Requests received after bid opening will not be considered except for the following limited conditions:
  - a) Product discontinued.
  - b) Insufficient quantity. Except when the trade contractor failed to award subcontract in sufficient time or failed to place orders for products so as to ensure delivery without delaying work.
  - c) Delays beyond the reasonable control of the trade contractor, such as strikes, lockouts, storms, fires, or acts of God, which may preclude the procurement and delivery of products for purposes of the Project.
3. No consideration will be given to substitutions after the Bid Opening Date.

## **1.10. METHOD OF AWARD**

- A. If the Owner should award a Contract, the Owner will award it to the lowest responsible Bidder with full consideration given to the contractor's conformity with specifications, terms of delivery, completion of schedule, number of crew days, quality, serviceability, and Technical Proposal, as determined by the Owner.
- B. In awarding the contract, the Owner may take into consideration skill, facilities, capacity, experience, ability, responsibility, previous work with the Owner, work history on other projects, financial standing of bidder, amount of work being carried on by bidder, quality and efficiency of equipment to be furnished, and necessity of prompt and efficient completion of work herein described.

## **1.11. CONTRACT DOCUMENTS REQUIREMENTS**

- A. The Contract Documents include the following items:

1. Owner/Contractor Agreement (A.I.A. Document A101-2017).
2. ADVERTISEMENT FOR BIDS
3. INSTRUCTIONS TO BIDDERS
4. BID FORM
5. AFFIDAVITS AND CERTIFICATIONS
6. GENERAL CONDITIONS
7. SUPPLEMENTARY CONDITIONS
8. PLANS AND SPECIFICATIONS
9. PREVAILING WAGE REQUIREMENTS
10. TECHNICAL PROPOSAL
11. ADDENDA (IF ANY)
12. SECTION 01010 - PROJECT SUMMARY
13. SECTION 01026 - UNIT PRICES
14. SECTION 01027 - APPLICATIONS FOR PAYMENT
15. SECTION 01028 - CHANGE ORDER PROCEDURES
16. SECTION 01030 - ALTERNATES
17. SECTION 01040 - PROJECT COORDINATION
18. SECTION 01060 - REGULATORY REQUIREMENTS
19. SECTION 01200 - PROJECT MEETINGS
20. SECTION 01310 - CONSTRUCTION SCHEDULES
21. SECTION 01370 - SCHEDULE OF VALUES
22. SECTION 01410 - TESTING LABORATORY SERVICES
23. SECTION 01500 - TEMPORARY FACILITIES AND CONTROLS
24. SECTION 01630 - SUBSTITUTIONS AND PRODUCT OPTIONS
25. SECTION 01700 - CONTRACT CLOSEOUT
26. SECTION 01710 - FINAL CLEANING
27. SECTION 02080 - ASBESTOS ABATEMENT
28. SECTION 028313- UNIVERSAL AND HAZARDOUS WASTE MANAGEMENT

- B. Any Contract resulting from the bid process will incorporate the terms and provisions of the Contract Documents. It is intended that the terms and conditions contained in the Contract Documents shall prevail over conflicting terms and conditions of Contractor's proposal. Bidders shall not make any revisions to the bid documents. Revisions to the bid documents may only be made by the Owner or the Asbestos Project Designer. Bids submitted with modifications shall be considered non-responsive and shall be rejected. Bidder's printed terms and conditions are NOT considered as exceptions to the Contract.

#### **1.12. BID SECURITY**

- A. All bids must be accompanied by a Bid Bond, Certified Check or Bank Draft in an amount of Five Percent (5%) of the Base Bid. All Bid Bonds must be on A.I.A. Form A-310, current edition or on form furnished with the Bid Forms.

1. Make bid security payable to:

East Aurora School District 131  
417 5th Street  
Aurora, Illinois 60505

2. The bid security of all except the three lowest bidders will be returned within five (5) days after the award of the Contract.
3. The bid security of the successful bidder will be returned promptly after the Owner and the accepted bidder have executed the Contract.

**1.13. OTHER CERTIFICATIONS AND SUBMITTALS**

- A. All bidders must complete and sign the certifications contained in Document 00450 - Affidavits and Certifications and submit them with their bid proposals. FAILURE TO DO SO WILL RESULT IN DISQUALIFICATION OF BIDDER.

**1.14. POWER OF ATTORNEY**

- A. Attorneys-in-Fact who sign bonds, agreements or bids must file with each a certified and effectively dated copy of their Power of Attorney.

**1.15. EMPLOYMENT AND LABOR PROVISIONS**

- A. In the employment and use of labor, the Contractor and his subcontractors shall conform to the Illinois Statutory requirements regarding labor and wages. See Document 00820 - Prevailing Wage Requirements.

**1.16. CREW DAYS**

- A. Each bidder shall determine the number of crew days required to complete the project and indicate that number in the Bid Form, Section 00300. Refer to the Supplemental Conditions, Section 00800, for the definition of CREW DAYS. The Owner may add the cost for Crew Days to the Total Base Bid to determine the Total Base Cost Amount to the Owner for the project to determine the lowest responsible bidder.

**1.17. AMENDMENT OF BIDDING DOCUMENTS**

- A. The Owner expressly reserves the right to make any changes it deems necessary in the Contract Documents, including these instructions, prior to the award of a contract pursuant to the bidding process. The Bidder, itself, shall be responsible for determining, from time to time prior to the bid opening whether any such changes have been made. The Bidder may do so by contacting TEM Environmental, Inc. at the address noted above.

**1.18. TECHNICAL PROPOSAL**

- A. Bidder shall submit, at the time of bidding, a written descriptive Technical Proposal which shall explain and illustrate the process which will be employed by the Bidder in conducting the abatement work. See Section 00850 - Technical Proposal.

**1.19. EXECUTION OF CONTRACT**

- A. The Contract shall be executed by the successful Bidders and returned together with the required Performance Bond and Labor and Material Payment Bond within 10 days after the Contract has been received by the Bidder.
- B. If the Bidder to whom award is made is a corporation organized under the laws of a State other than Illinois, the bidder shall furnish the Owner a copy of the corporation's certificate of authority to do business in the State of Illinois with the return of the executed contract and bonds. Failure to furnish such evidence of a certificate of authority within the time required will be considered as just cause for the annulment of the award and forfeiture of the bid security, not as a penalty, but in payment of liquidated damages sustained as a result of such failure.

**1.20. FAILURE TO EXECUTE CONTRACT**

- A. Failure of the successful Bidder to execute the Contract and file acceptable bonds within 10 days after the contract has been mailed to it shall be just cause for the cancellation of the



award and the forfeiture of the bid security which shall become the property of the Owner, not as a penalty but in liquidation of damages sustained. Award may then be made the next lowest responsible Bidder or the work may be re-advertised.

**1.21. TIME OF COMPLETION**

- A. Time is of the essence in the completion of the Project.
- B. Bidders shall commence abatement work on the specified dates and work must be carried on continuously thereafter until completion, which shall occur no later than Completion Date.
- C. The Asbestos Abatement Work as specified must be completed in accordance with the Illinois Asbestos Abatement Act and Rules and Regulations and with these specifications no later than midnight (12:00 am) on the date indicated.

**1.22. OCCUPATIONAL SAFETY AND HEALTH ACT**

- A. Each bidder shall carefully examine the Occupational Safety and Health Act of 1970, ("Act") published in May, 1971, and all subsequent revisions including 29 CFR 1910.1001, 29 CFR 1926.1101, and 29 FR 1910.134, and the specific regulations governing procedures, techniques, safety precautions, equipment design, and the configuration of the same as required under this Act and each bidder agrees as evidenced by its submission of a bid to comply with all terms of the Act and to perform and complete in a workmanlike manner all work required in full compliance with said Act.

END 00100.

**BIDDING & CONTRACT REQUIREMENTS**  
**Document 00300 - Bid Form: Bid Package 1: Krug Elementary School**

To: Board of Education  
 East Aurora School District 131  
 417 5th Street  
 Aurora, Illinois 60505

I. I/We as contractor, having familiarized ourselves with local conditions affecting the Work and with the proposed Contract Documents on file at the office of the Owner, hereby proposed to perform everything required to be performed and to provide all of the labor, materials, necessary equipment and all utilities and transportation and services necessary to perform and complete in a workmanlike manner all work required to complete the proposed work indicated in the Contract Documents for Asbestos Abatement Work at Krug Elementary School, all in accordance with the Plans and Specifications prepared by the office of TEM Environmental, Inc. dated October 22, 2020 including Addenda No. \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ and issued thereto for the sums of:

**BID ITEM 1 – Lump Sum Bid for Asbestos Abatement at Krug Elementary School,**

Item #	Bid Items – Krug Elementary School	Bid Price
1B	Asbestos Abatement at Krug Elementary School	\$
2B	Allowance for Unforeseen Conditions	\$ 20,000
3B	Total Cost: Base Bid PLUS Allowance	\$

**II. Alternate Prices**

Cost to perform:

Alternate No. 1

1. Removal and Disposal of approximately 60SF of floor tile and mastic using mechanical means in rooms identified by keynote A and 4 on drawing ASB-01

Add to the Lump Sum Base Bid of Krug Elementary School \$ \_\_\_\_\_

Alternate No. 2

2. Non-friable removal and disposal of approximately 150SF of floor tile and mastic in rooms identified by keynote A and 4 on drawing ASB-01.

Add to the Lump Sum Base Bid of Krug Elementary School \$ \_\_\_\_\_

Alternate No. 3

3. Removal and disposal of approximately 150SF of floor tile and mastic using mechanical means in rooms identified by keynote A and 4 on drawing ASB-01

Add to the Lump Sum Base Bid of Krug Elementary School \$ \_\_\_\_\_

Alternate No. 4

4. Removal and disposal of floor tile and mastic using mechanical means from the entire room and the removal of sink cabinets and sinks with ACM coating from rooms 02, 03, 04, 05, 06, 07, 20 and 21.

and

Removal and disposal of the sink cabinet, sink with ACM coating and ACM floor tile and mastic under cabinet from room 01.

and

Removal and disposal of sink cabinets and sinks with ACM coating from rooms 16, 17, 18 and 19 using the mini-containment method.

Add to the Lump Sum Base Bid of Krug Elementary School \$\_\_\_\_\_

**III. Unit Prices**

Unit Price 1: Cost to remove and dispose of additional floor tile and mastic, mastic must be removed by mechanical means:

\$\_\_\_\_\_/Square foot

Unit Price 2: Cost to remove and dispose of additional pipe insulation using the glovebag method inside a negative pressure mini containment exclusive of cost to construct mini containment and remote worker decontamination chamber:

\$\_\_\_\_\_/Linear Foot

Unit Price 3: Cost to construct a remote decontamination chamber associated with Unit Cost 2:

\$\_\_\_\_\_

Unit Price 4: Cost to construct mini containment associated with Unit Price 2 and 3

\$\_\_\_\_\_/Square foot of containment

- IV. Accompanying this bid is a bid security, which is agreed will be forfeited to the aforementioned if the undersigned fails to execute the Contract and furnish evidence to the Owner of bidder's ability to become bonded and to provide insurance coverage as specified, within 10 days after its receipt notice that it is the successful bidder.

In signing and submitting this Bid, the undersigned certifies that all materials and construction to be provided are as indicated in the proposed Contract Documents.

Name of Bidder\_\_\_\_\_

V. Time of Completion: If awarded the Contract, the Bidder agrees to perform and complete all work for the Owner occupancy within the following dates:

	<b>START DATE</b>	<b>COMPLETION DATE</b>
Krug Elementary School	December 18, 2020	June 15, 2021

VI. The undersigned hereby states that the number of Crew Days as defined in the Supplementary Conditions will not exceed the following:

1. Number of Crew Days \_\_\_\_\_

DATED: \_\_\_\_\_

FIRM NAME: \_\_\_\_\_

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

By \_\_\_\_\_  
Signature

\_\_\_\_\_  
Typed or Printed Name & Title

TELEPHONE: \_\_\_\_\_

Where the Bidder is a corporation, add

Attest \_\_\_\_\_ (SEAL)  
Secretary

CERTIFIED OR CASHIERS CHECK, BID BOND, OR BANK DRAFT ENCLOSED IN  
THE FOLLOWING AMOUNT \$ \_\_\_\_\_

END 00300

BIDDING & CONTRACT REQUIREMENTS  
 Document 00301 - Bid Form: Bid Package 2: Waldo Middle School

To: Board of Education  
 East Aurora School District 131  
 417 5th Street  
 Aurora, Illinois 60505

I. I/We as contractor, having familiarized ourselves with local conditions affecting the Work and with the proposed Contract Documents on file at the office of the Owner, hereby proposed to perform everything required to be performed and to provide all of the labor, materials, necessary equipment and all utilities and transportation and services necessary to perform and complete in a workmanlike manner all work required to complete the proposed work indicated in the Contract Documents for Asbestos Abatement Work at Waldo Middle School, all in accordance with the Plans and Specifications prepared by the office of TEM Environmental, Inc. dated October 22, 2020 including Addenda No. \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ and issued thereto for the sums of:

**BID ITEM 1 – Lump Sum Bid for Asbestos Abatement at Waldo Middle School,**

Item #	Bid Items – Waldo Middle School	Bid Price
1B	Asbestos Abatement at Waldo Middle School	\$
2B	Allowance for Unforeseen Conditions	\$ 50,000
3B	Total Cost: Base Bid PLUS Allowance	\$

**II. Alternate Prices**

Cost to Perform:

Alternate No. 1

1. Removal and disposal if asbestos containing 1x1 tile and adhesive from 2<sup>nd</sup> and 3<sup>rd</sup> Floor Corridor. (Plaster to remain).

Add to the Lump Sum Base Bid of Waldo Middle School \$ \_\_\_\_\_

Alternate No. 2

2. Removal and disposal of linoleum flooring with underlying asbestos containing 9"x9" floor tile and mastic from the entire area of Room 111 and 112.

Add to the Lump Sum Base Bid of Waldo Middle School \$ \_\_\_\_\_

Alternate No. 3

- 3. All Base Bid Work shall start on December 18, 2020 and shall be completed by January 17, 2021 (except the exterior, boiler room, chimney, band room and LRC which will be completed by April 12, 2021).

Add or Deduct to the Lump Sum Base Bid of Waldo Middle School \$ \_\_\_\_\_

Alternate No. 4

- 4. All Base Bid Work, Alternate #1 and Alternate #2 shall start on December 18, 2020 and shall be completed by January 17, 2021 (except the exterior, boiler room, chimney, band room and LRC which will be completed by April 12, 2021).

Add of Deduct to the Lump Sum Base Bid of Waldo Middle School \$ \_\_\_\_\_

Alternate No. 5

- 5. Base Bid Work includes selective demolition of the boilers to provides access for sampling by others. Alternate 5 includes the cost to complete full containment removal and disposal of identified ACM from the boiler interior. All boiler components to be disposed by others.

Add to the Lump Sum Base Bid of Waldo Middle School \$ \_\_\_\_\_

**III. Unit Prices**

Unit Price 1: Cost to remove and dispose of additional floor tile and mastic, mastic must be removed by mechanical means:

\$ \_\_\_\_\_/Square foot

Unit Price 2: Cost to remove and dispose of additional pipe insulation using the glovebag method inside a negative pressure mini containment exclusive of cost to construct mini containment and remote worker decontamination chamber:

\$ \_\_\_\_\_/Linear Foot

Unit Price 3: Cost to construct a remote decontamination chamber associated with Unit Cost 2:

\$ \_\_\_\_\_

Unit Price 4: Cost to construct mini containment associated with Unit Price 2 and 3

\$ \_\_\_\_\_/Square foot of containment

- IV. Accompanying this bid is a bid security, which is agreed will be forfeited to the aforementioned if the undersigned fails to execute the Contract and furnish evidence to the Owner of bidder's ability to become bonded and to provide insurance coverage as specified, within 10 days after its receipt notice that it is the successful bidder.

In signing and submitting this Bid, the undersigned certifies that all materials and construction to be provided are as indicated in the proposed Contract Documents.

Name of Bidder \_\_\_\_\_

V. Time of Completion: If awarded the Contract, the Bidder agrees to perform and complete all work for the Owner occupancy within the following dates:

	<b>START DATE</b>	<b>COMPLETION DATE</b>
Waldo Middle School	December 18, 2020	April 12, 2021

VI. The undersigned hereby states that the number of Crew Days as defined in the Supplementary Conditions will not exceed the following:

1. Number of Crew Days \_\_\_\_\_

DATED: \_\_\_\_\_

FIRM NAME: \_\_\_\_\_

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

By \_\_\_\_\_  
Signature

\_\_\_\_\_  
Typed or Printed Name & Title

TELEPHONE: \_\_\_\_\_

Where the Bidder is a corporation, add

Attest \_\_\_\_\_ (SEAL)  
Secretary

CERTIFIED OR CASHIERS CHECK, BID BOND, OR BANK DRAFT ENCLOSED IN

THE FOLLOWING AMOUNT \$ \_\_\_\_\_

END 00300

BIDDING & CONTRACT REQUIREMENTS  
Document 00410 - Bid Bond

KNOW ALL MEN BY THESE PRESENTS, THAT WE \_\_\_\_\_ as Principal, hereinafter called the Principal, and a corporation duly organized under the laws of the State of \_\_\_\_\_ as Surety, are held and firmly bound unto \_\_\_\_\_ as Obligee, hereinafter called Obligee, in the sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, Administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for \_\_\_\_\_

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
Principal SEAL

\_\_\_\_\_  
Title

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Surety SEAL

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Title

END 00410



BIDDING & CONTRACT REQUIREMENTS  
Document 00440 - Substitution Sheet

All bids shall be based upon the provisions of the proposed Contract Documents.

Bidders desiring to make substitutions shall list such proposed substitutions below, together with the amount to be added or deducted from the amounts of their base bids.

The Owner reserves the right to reject all such substitutions, and such substitutions.

Complete descriptions, and technical data shall accompany all proposed substitutions.

**NOTE:** Manufacturer's names and material approved by the Designer during the bidding time, but not shown in Addenda, must be listed below if said material is to be considered.

<u>BRAND OR MAKE SPECIFIED</u>	<u>PROPOSED SUBSTITUTIONS</u>	<u>ADD</u>	<u>DEDUCT</u>
------------------------------------	-----------------------------------	------------	---------------

NAME OF BIDDER: \_\_\_\_\_

Date: \_\_\_\_\_

END 00440

**1. GENERAL**

**1.01 NON-COLLUSION AFFIDAVIT**

The undersigned, being duly sworn, on oath says that he/she has not, nor has any other member, representative, nor agent of the firm, company, corporation or partnership represented by him/her, entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone at such letting, nor to prevent any person from bidding nor to induce anyone to refrain from bidding, and that this bid is made without reference to any other bid and without any agreement, understanding or combination with any other person in reference to such bidding.

He further says that no person or persons, firm or corporation has, have or will receive directly or indirectly, any rebate, fee, gift, commission or thing of value on account of such sale.

**1.02 CERTIFICATE OF COMPLIANCE, ILLINOIS DRUG FREE WORKPLACE ACT**

The undersigned, if having 25 or more employees, does hereby certify pursuant to Section 3 of the Illinois Drug-Free Workplace Act (30 ILCS 580/1 et seq.) that [he, she, it] shall provide a drug-free workplace for all employees engaged in the performance of work under the contract by complying with the requirements of the Illinois Drug-Free Workplace Act and, further certified, that [he, she, it] is not ineligible for award of this contract by reason of debarment for a violation of the Illinois Drug-Free Workplace Act.

**1.03 CERTIFICATE OF COMPLIANCE, ILLINOIS HUMAN RIGHTS ACT**

The undersigned does hereby certify pursuant to Section 2-105 of the Illinois Human Rights Act (775 ILCS 5/2-105), that (he, she, it) has adopted a written sexual harassment policy that includes at a minimum the following information: (i) the illegality of sexual harassment; (ii) the definition of sexual harassment under Illinois Law; (iii) a description of sexual harassment, utilizing examples; (iv) a vendor's internal complaint process including penalty; (v) the legal recourse, investigative and complaint process available through the Department of Human Rights Commission; (vi) directions on how to contact the Department and Commission; and (vii) protection against retaliation.

**1.04 BIDDER ELIGIBILITY CERTIFICATION**

The undersigned, pursuant to section 33E-11 of the Illinois Criminal Code of 1961 as amended, hereby certifies that neither (he, she, it) nor any of (his, her, its) partners, officers, or owners of (his, her, its) business has been convicted in the past five (5) years of the offense of bid-rigging under section 33E-3 of the Illinois Criminal Code of 1961 as amended and that neither (he, she, it) nor any of (his, her, its) partners, officers, or owners of (his, her, its) business has ever been convicted of the offense of bid-rotating under section 33E-4 of the Illinois Criminal Code of 1961 as amended.

**1.05 BIDDER SEXUAL HARASSMENT ELIGIBILITY CERTIFICATION**

The undersigned, pursuant to Public Act 87-1257 (Illinois Revision Statutes, 1987, Chapter 68, Paragraph 1-1011, et. Seq.) requires that all Public Contracts have adopted written sexual harassment policies. The Contractor as part of its bid, hereby certifies that the contractor is in compliance with Equal Employment Opportunity Clause and the Illinois Fair Employment Practice Act as stated under Compliance with Legislation.

\_\_\_\_\_  
(Name of Contractor)

**1.06 Signatures and Attests**

Contractor by signing below certifies that the above certifications and affidavits are true and correct as if each one had been signed individually.

Corporate Name \_\_\_\_\_

By \_\_\_\_\_

Business \_\_\_\_\_

(CORPORATE SEAL)

Names of Officers:

President \_\_\_\_\_

Secretary \_\_\_\_\_

Treasurer \_\_\_\_\_

Attest: \_\_\_\_\_

Secretary

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2020

My Commission Expires \_\_\_\_\_, 20\_\_\_\_.

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

\_\_\_\_\_  
Notary Seal

END 00450

**1. GENERAL**

**1.1. GENERAL CONDITIONS**

- A. The "General Conditions" of this contract is the American Institute of Architects Document No. A-201. "The General Conditions of the Contract for Construction," 2017 Edition, 15 Articles, hereinafter referred to as the A.I.A. General Conditions.

END 00700

**1. GENERAL**

**1.01. GENERAL CONDITIONS**

- A. The "General Conditions" of this contract is the American Institute of Architects document No. A-201. "The General Conditions of the Contract for Construction," 2017 Edition, 15 Articles, hereinafter referred to as the A.I.A. General Conditions.

**1.02. PURPOSE**

- A. The following supplements modify the A.I.A. General Conditions. Where a portion of the General Conditions is modified or deleted by these Supplementary Conditions, the unaltered portions of the General Conditions shall remain in effect. To the extent of any conflict between the terms and provisions of the General Conditions and these Supplementary Conditions, the terms and provisions of these Supplementary Conditions shall control.

**1.03. MODIFICATIONS TO A.I.A. GENERAL CONDITIONS**

- A. Article I: General Provisions

1. Add the following to subparagraph 1.2.1:

1.2.1.2 Where conflicts exist within or between parts of the Contract Documents, or between the Contract Documents and the applicable standards, codes and ordinances, the more stringent, or higher quality or greater quantity requirements shall apply. Large scale drawings take precedence over small scaled drawings, figured dimensions over scaled dimensions and noted materials over graphic representations.

1.2.1.3 The specifications are of the abbreviated type and include incomplete sentences. Omission of phrases such as "The Contractor shall, or "conforming to the requirements of" are intentional; omitted words or phrases shall be supplied by inference in the same manner as they are when a "Note" occurs on the drawings. Words in the singular shall include a plural whenever applicable, or the context so indicates.

- B. Article 3: Contractor

1. Add the following subparagraph 3.4.4 to Paragraph 3.4

- a) 3.4.4 Criminal Background Checks (ref. Child Sex Offender and Murderer Community Notification Act and the Owner's Criminal Background Check Policy).
- b) 3.4.4.1 Every person employed to perform work at the construction site shall undergo a Criminal Background Check as required by the School District's policy. Said criminal background check shall be performed by the Regional Office of Education or its designee before each such person reports for work at the site.
- c) 3.4.4.2 The general procedure shall be as follows:
- a. The Contractor shall make an appointment with the District Name Administrative Office to complete the required forms and paperwork at the District Offices.
  - b. The Contractor shall then make an appointment with the Regional Office of Education or its designee to have each person fingerprinted at the Regional Office of Education or its designee.

- c. Each such person shall report to the Regional Office of Education or its designee be fingerprinted and complete the paperwork as required by the Regional Office of Education.
  - d) 3.4.4.3 No person may work on the site until all of the requirements of paragraph 3.4.4.2 are completed.
  - e) 3.4.4.4 If at any time any such person is deemed to have not met the requirements of the Criminal Background Check that person shall be removed from the site immediately upon notification of such failure.
  - f) 3.4.4.5 The fee charged by the Regional Office of Education for the Criminal Background Check shall be paid by the District.
  - g) 3.4.4.6 All other costs associated with conducting the Criminal Background Checks shall be at the Contractor's expense.
2. Add the following subparagraph to the end of Paragraph 3.9.: "3.9.4 Failure to supervise the job properly, as determined by the Asbestos Project Manager and Owner shall be deemed a default under the Contract Documents."
  3. Modify Subparagraph 3.15.2 as follows: In the first line after the word "up" add the words "during and/or, at completion of the Work."
  4. Modify Subparagraph 3.18.1 as follows: In the third line after the word "fees" add the words "and costs and expenses of litigation."
  5. Add the following Subparagraph 3.18.3 to Paragraph 3.18: "3.18.3 None of the foregoing provisions shall deprive, negate, abridge or reduce rights or remedies otherwise available to an indemnified party hereunder, whether arising at law or inequity."

C. Article 4: Administration of the Contract 1. 4.1 ARCHITECT

1. Add the following Subparagraph 4.1.3 to Paragraph 4.1: "4.1.3 The terms "Architect", "Consultant" and "Asbestos Project Designer" are used interchangeably throughout the contract documents. Any and all rights and obligations, and duties thereof shall be considered singular in reference."
2. Asbestos Project Designer's ADMINISTRATION OF THE CONTRACT

Change Paragraph 4.2.10. to read:

4.2.10 An Asbestos Project Manager/Air Sampling Professional who meets the requirements of the Illinois Department of Public Health will be employed at the site by the Owner. The APM/ASP's limitations of authority are as set forth in the Illinois Asbestos Abatement Act and Rules and Regulations, and in this Project Manual.

D. Article 8 - Time

1. DELETE Subparagraph 8.3.1 and substitute the following:

"8.3.1 If the Contractor is delayed at any time in the progress of the Work by any act or neglect of the Owner, Owner's employees, any separate contractor employed by the Owner, by changes ordered in the Work (which changes do not result, in whole or in part, from neglect of the Contractor, his agents or employees or subcontractors), regional labor disputes as they affect the Work that cannot be resolved by the Contractor agreeing to the wages, hours and

working conditions as they have been established as the pattern settlement with respect to the said dispute, fire which does not result from any willful or negligent act of the Contractor, any subcontractors or any of their respective agents or employees, an unusual delay in transportation that could not have been prevented by the Contractor's planning or adequate investigation of conditions, adverse weather conditions not reasonably anticipative, or delay authorized by the Owner pending arbitration, the date of Substantial Completion shall be extended by Change Order for such reasonable time as the Asbestos Project Designer shall determine. It is further understood that only delays caused by the conditions listed above which the Contractor could not reasonably anticipate, are beyond the Contractor's control and which delays could not have been mitigated by the Contractor will be sufficient to extend the Substantial Completion date. The Contractor has an affirmative duty to inquire and make reasonable investigation where circumstances would alert the reasonable Contractor to a potential delay for whatever reason. Where a delay beyond the Contractor's control and not reasonably anticipative occurs, the Contractor has an affirmative duty to mitigate the effect of that delay on the progress of the Work. An extension of the Substantial Completion date will not be granted to the extent that the Contractor breaches said duty to mitigate."

2. Modify Subparagraph 8.3.3 as follows:

In the first line, delete the words "either party" and insert the word "Owner."

E. Article 9 - Payments and Completions

1. Delete Subparagraph 9.3.1 and substitute the following:

"9.3.1 At least fifteen days before the date established for each progress payment, the Contractor shall submit to the Asbestos Project Designer an itemized Application for Payment for operations completed in accordance with the schedule of values. Such application shall be notarized and supported by such data substantiating the Contractors right to payment as the Owner or Asbestos Project Designer may require, such as copies of requisitions from Subcontractors and material suppliers, and reflecting retainage if provided for elsewhere in the Contract Documents. The Contractor's Application for Payment shall be made on or before the tenth day of each month."

2. Delete Subparagraph 9.3.1.1 in its entirety.

3. Delete Subparagraph 9.3.2 and substitute the following:

"9.3.2 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. Payment for materials or equipment stored on the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment."

3. Delete Subparagraph 9.3.3 and substitute the following:

"9.3.3 The Contractor warrants that title to all Work covered by and Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment for which Certificates for Payment have been previously issued and payments received from the Owner shall be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, Subcontractors, material suppliers, or other persons or entities entitled to making a claim by reason of having provided labor, materials and equipment relating to the Work."

5. Add the following Paragraph to Section 9

"9.11 Liquidated Damages

9.11.1 The Contractor acknowledges that the Owner will suffer significant financial loss if the Project is not Substantially Complete on the date set forth in the Contract Documents. The Contractor further acknowledges that the measure of such loss would not be susceptible to precise calculation. To protect the Owner against said loss, the Owner and the Contractor hereby agree if the Contractor and the Contractor's surety, if any, shall be liable for and shall pay to the Owner the sum of Five Thousand Dollars (\$5000.00) per calendar day as liquidated damages for each calendar day of delay for each phase of work until the Work is Substantially Complete."

F. Article 10 - Protection of Persons and Property

1. Modify Subparagraph 10.2.1 as follows: In the first line after the word "precautions", add the following" "including those which are customary in the construction industry in the locale where the Work is situated."

2. Add the following Subparagraph 10.2.9 to Paragraph 10.2:

"10.2.9 The Contractor, prior-to commencing the Work, shall submit to the Asbestos Project Designer, in writing, a statement certifying that he is familiar with the Illinois Asbestos Abatement Act, Rules and Regulations, and further that he will maintain at the Project a copy of said publication and will strictly enforce the applicable requirements of same. Contractor will also state the name of the Contractor's Safety Engineer who will be responsible for enforcing all Safety Requirements."

6. Add the following Subparagraph 10.2.10 to Paragraph 10.2:

"10.2.10 In the event the Contractor fails to take reasonable precautions, as determined by the Asbestos Abatement Manager, to protect the safety of the Work as required under Subparagraph 10.2.1 of these General Conditions, the Owner shall have the right to protect the Work by any reasonable method. The Contractor shall be liable to the Owner for the costs which the Owner reasonably incurs in so acting to protect the Work."

7. Add the following to the end of Subparagraph 10.3.1:

"- provided, however, that the emergency did not result from the Contractor's or any of its employees' or agent's own act(s) of negligence."

G. Article 11: Insurance and Bonds

1. Modify subparagraph 11.1.1 as follows:

In the first line following the word "maintain" insert the words:

"in a company or companies which have a minimum A.M. Best Rating of A-XV and to which the Owner has no reasonable objection."

2. Add the following new clauses to Subparagraph 11.1.1:

".9 The contractor shall also purchase and maintain such insurance as will protect the Owner and the Asbestos Project Designer and their agents and employees from and against all claims, damages, losses and expenses including



Attorney's fees arising out of or resulting from the performance of the work provided that such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) including the loss of use resulting therefrom, and (2) is caused in whole or in part by the negligent act or omission of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone whose acts any of them may be liable, regardless of whether or not it is caused in part by a party to whom insurance is afforded pursuant to this paragraph."

".10 In any and all claims against the Owner or the Asbestos Project Designer or any of their agents or employees by any employee of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone whose acts any of them may be liable, the insurance obligation under this paragraph shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any subcontractor under Workmen's Compensation Acts, disability benefit acts or other employee benefit acts."

".11 The insurance obligations of the Contractor under this paragraph shall not extend to the liability of the Asbestos Project Designer, his agents or employees arising out of (1) the preparations or approval of maps, drawings, opinions, reports, surveys, Change Orders, designs or specifications, or (2) the giving of or the failure to give directions or instructions by the Designer his agents or employees provided such giving or failure to give is the primary cause of the injury or damage."

".12 Liability Insurance shall include the major divisions of coverage and be on a comprehensive basis including:

- a) Premises Operations, including X, C. and U coverages as applicable.
- b) Independent Contractors' Protective.
- c) Products and Completed Operations.
- d) Personal Injury Liability with Employment Exclusion deleted.
- e) Contractual, including specified provision for Contractor's obligation under Paragraph 3.18.
- f) Owned, non-owned and hired motor vehicles.
- g) Broad Form Property Damage including Completed Operations.
- h) Occurrence based asbestos abatement liability with no "sunset clause".
- i) Environmental impairment liability coverage.

3. Add the following at the end of Subparagraph 11.1.2:

"The insurance provided for in Subparagraph 11.1.1 also must be endorsed with an endorsement in a form approved or permitted by the applicable statutes or regulations of the State of Illinois, waiving the carrier's right of subrogation with respect to the Owner."

4. Add the following Clause 11.1.2.1 to 11.1.2:

"11.1.2.1 The insurance required by Subparagraph 11.1.1 shall be written for not less

than the following limits, or greater if required by law:

a) Worker's Compensation:

- 1) State: Statutory
- 2) Employer's Liability
  - a) \$1,000,000. per Accident
  - b) \$1,000,000 per employee
  - c) \$1,000,000 policy limit

b) Comprehensive or Commercial General Liability, including Premises-Operations; Independent Contractors' Protective; Products and Completed Operations; Broad Form Property Damage:

1) Bodily Injury:

\$2,000,000. Each Occurrence  
\$2,000,000. Aggregate

2) Property Damage:

\$2,000,000. Each Occurrence  
\$2,000,000. Aggregate

3) Products and Completed Operations to be maintained for one (1) year after final payment:

\$2,000,000. Aggregate

4) Property Damage Liability Insurance shall provide X, C and U coverage.

5) Broad Form Property Damage Coverage shall include Completed Operations.

6) Asbestos Abatement Liability:

\$1,000,000. Each Occurrence  
\$1,000,000. Aggregate

c) Contractual Liability:

1) Bodily Injury:

\$2,000,000. Each Occurrence  
\$2,000,000. Aggregate

2) Property Damage:

\$2,000,000. Each Occurrence  
\$2,000,000. Aggregate

d) Personal Injury, with Employment Exclusion deleted:

\$2,000,000. Aggregate

e) Business Auto Liability (including owned, non-owned and hired vehicles):

1) Bodily Injury:

\$1,000,000. Each Person  
\$1,000,000. Each Occurrence

2) Property Damage:

\$1,000,000. Each Occurrence

f) Umbrella Excess Liability:

\$5,000,000. Over primary insurance.

g) Environmental Impairment Liability:

\$2,000,000. Each Occurrence  
\$1,000,000. Aggregate

5. Add the following new clauses to subparagraph 11.1.3:

"If this insurance is written on the Comprehensive General Liability policy form, the Certificates shall be A.I.A. Document G705, Certificate of Insurance. If this insurance is written on a Commercial General Liability Policy form, ACORD Form 25S will be acceptable. A copy of each Certificate of Insurance shall be furnished to the Asbestos Project Designer.

6. Delete Subparagraph 11.2 and replace with the following subparagraphs:

"11.2.1 The Contractor shall purchase and maintain insurance covering the Owner's contingent liability for claims which may arise from operations under the Contract and that will protect the Owner, the Asbestos Project Designer, the asbestos consultant and their agents and employees from and against all claims, damages, losses and expenses including attorneys' fees' arising out of or resulting from the performance of the work specifically pertaining to the Illinois Structural Words Act, provided that any such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease, or death, or to injury or to destruction of tangible property (other than the work itself) including the loss of use resulting therefrom and (2) is cause in whole or in part of any negligent act of omission of the Contractor, and subcontractor, anyone directly or indirectly employed by any of the, regardless of whether or not it is caused in part by a party to whom insurance is afforded pursuant to this paragraph."

"11.2.2 In any and all claims against the Owner, the Asbestos Project Designer, and the asbestos consultant or any of their agents or employees by any employee of the Contractor, any subcontractor, anyone directly or indirectly employed by any of the, or anyone for whose acts any of them may be liable, the insurance obligation under this paragraph shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any subcontractor under Workman's Compensation Acts, disability benefit acts or other employee benefit acts."

"11.2.3 The insurance obligations of the Contractor under this paragraph shall not extend to the liability of the Asbestos Project Designer, his agents or employees arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications or (2) the giving of or failure to give directions or instructions by the Asbestos Project Designer, his agents or employees provided that such giving or failure to give is the primary cause of the injury damage."

"11.2.4 The Contractor shall supply the Owner with the original policy and shall furnish the Asbestos Project Designer a memorandum copies of said policy. The named insured in this Protective Liability Policy shall be:

East Aurora School District 131  
1177 Dee Road  
Aurora, Illinois 60505

TEM Environmental, Inc.  
174 N. Brandon Drive  
Glendale Heights, Illinois 60139

Mr. James Tuinenga  
Asbestos Project Designer

7. DELETE Subparagraphs 11.3.1, 11.3.11, 11.3.1.2, 11.3.1.3, 11.3.1.4 and 11.3.2.

8. Add the following sentence to Subparagraph 11.3.7:

"In waiving rights of recovery under -terms of the paragraph, the term "Owner" shall be deemed to include his employees as the Owner's representatives as provided for in the Contract Documents."

9. DELETE Subparagraph 11.4.1 and substitute the following:

"11.4.1 The Contractor shall furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder. Bonds shall be obtained from a company with a minimum A.M. Best rating of A-V and to which the Owner has no reasonable objection. Cost thereof shall be included in the Contract Sum. The amount of each bond shall be equal to One Hundred percent of the Contract Sum."

"11.4.1.1 The Contractor shall deliver the required bonds to the Owner not later than three days following the date the Agreement is entered into, or if the Work is to be commenced prior thereto in response to a letter of intent, the Contractor shall, prior to the commencement of the work, - submit evidence satisfactory to the Owner that such bonds will be furnished.

"11.4.1.2 The Contractor shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney.

#### H. Article 13 - Miscellaneous Provisions

1. Add the following as Paragraph 13.8:

"13.8 EXCESS COSTS FOR ASBESTOS PROJECT MANAGEMENT AND AIR SAMPLING SERVICES.

13.8.1 The Owner shall assign an Asbestos Project Manager and Air Sampling Professional on-site at all times when abatement activities are in progress including, but not limited to, site preparation, containment construction, abatement, cleaning, clearance activities, teardown and disposal activities. Crew Days shall be included for non-friable floor tile work.

13.8.2 Crew Day - A Crew Day is one (1) eight (8) consecutive hour work shift on Monday through Friday for the abatement work activities as defined in Subparagraph 13.8.1. The number of crew days indicated on the Bid Form shall take into account

that a separate Project Manager is required for each active work area.

13.8.3 Payment requests shall state the total number of Crew Days accumulated to date as recorded by the Asbestos Project Designer for accounting purposes.

13.8.4 If the Contractor performs work any time on a Saturday, Sunday, or holiday, the additional hours worked shall be chargeable as two (2) times the fractional crew days used for a single working day.

13.8.5 Additional asbestos Project Management and Air Sampling Services required beyond the total number of Crew days in the Contractor's Bid shall be charged to the Contractor as liquidated damage. The cost for additional asbestos project management and air sampling services incurred by the owner shall be deducted from the Contractor's final payment unless the Contractor has a written agreement from the Owner to assume these costs. If the Contractor fails to complete the work within the number of Crew Days, as defined herein, indicated in the Contractor's Bid, the Owner shall deduct excess asbestos project management and air sampling service costs from the Contractor's payment requests, based on a rate of \$1,100 per Crew Day. Charges for hours worked in excess of 8 hours per shift, regardless of the Crew Day status, shall be deducted from the Contractor's final payment and assessed according to the following table:

Asbestos Project Manager	\$75.00/hr
Air Sampling Professional	\$60.00/hr
Per Diem Expenses (overnight each person)	\$70.00/day
Air Sample Analysis, Phase Contrast Microscopy, 24 hr TAT	\$25.00/ea
Air Sample Analysis, Transmission Electron Microscopy, 24 hr TAT	\$150.00/ea
Air Sampling Professional equipment charges	\$30.00/day

These amounts are in addition to any other liquidated damages assessed by the Owner due to the Contractor's failure to substantially complete the project in the time specified elsewhere in this document."

#### 1.04. SPECIAL CONDITIONS

##### A. Applicable Laws:

1. It is the public policy and law of the State of Illinois that employment opportunities be free from discrimination on the basis of race, color, sex, religion, national origin, or ancestry. This policy and law is set out in the Illinois Constitution. The equal employment obligations contained in the Contract Documents are intended to ensure compliance with the Illinois Laws and with the Illinois Fair Employment Practices Commission's Rules and Regulations for Public Contracts.
2. Contractor shall familiarize themselves with all provisions of All ACTS which affect labor and in addition should make an investigation of labor conditions and any negotiated labor agreements which may exist or are contemplated at this time. Nothing in the ACTS referred to in this Section shall be construed to prohibit the payment of more than the prevailing wage scale. See Document 00820 - Prevailing Wage Requirements.
3. Each Bidder shall carefully examine the Occupational Safety and Health Act of 1970, published in May, 1971, as issued by the Federal Register (OSHA), and the specific regulations governing procedures, techniques, safety precautions, equipment design, and the configuration of the same as required under this Act and each Bidder agrees as evidenced by his submission of a Bid to comply with all terms of the Act and to perform and complete in a workmanlike manner all work required in full compliance with said Act.

END 00800.

East Aurora School District 131  
2021 Asbestos Abatement

00800 - Supplementary Conditions

BIDDING AND CONTRACT REQUIREMENTS  
Document 00820 - Prevailing Wage Requirements

**1. GENERAL**

**1.01. REQUIREMENTS**

- A. In accordance with the Illinois Prevailing Wage Act, the Contractor must guarantee that not less than the prevailing wage will be paid to laborers, workers and mechanics performing work under the contract.
  
- B. Contractor shall have the sole responsibility and duty to ensure that the revised prevailing rate of hourly wages is paid by the Contractor and all subcontractors to each worker to whom a revised rate is applicable. Revisions of the prevailing wage as set forth above shall not result in an increase in the Contract Sum.

END 00820

## **1. GENERAL**

### **1.01 REQUIREMENTS**

- A. Bidders are required to describe and illustrate the Means and Methods, Work Schedule, Manpower requirements and other pertinent data relevant to the execution of the work.
- B. The Owner reserves the right to incorporate the Technical Proposal in the Contract Documents or reject the Technical Proposal as unsuitable.
- C. The Technical Proposal shall describe in narrative and graphic form, the Contractor's proposed procedure in dealing with, but not limited to, the following items:
  - 1. Project Schedule Bar Graph as per Document 00850-1.02.
  - 2. Equipment locations as per Document 00850-1.03.
    - a) Personnel Decontamination Unit.
    - b) Number and location of negative air machines.
    - c) Number and location of Type "C" supplied air units.
    - d) Location of waste-out unit and loading area.
    - e) Location of Contractor's administrative and staging area.
  - 3. Additional information considered relevant to the timely execution of the work: Document 00850-1.04.

### **1.02 PROJECT SCHEDULE**

- 1. Illustrate in bar graph form, the proposed scheduling of events.
- 2. Include start and completion dates.

Mobilization  
Preparation  
Removal  
First Clean  
Second Clean  
Third Clean  
Down Time  
Clean Check

- 3. Attach supplemental Data if necessary to clearly illustrate sequence of events.

### **1.03 EQUIPMENT LOCATIONS**

- 1. Illustrate on the Key Plan, locations of all equipment required.
- 2. Illustrate other relevant data.

**1.04 ADDITIONAL RELEVANT DATA**

1. Name and location of proposed dump site:

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2. Manpower requirements:

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3. Removal methods:

---

---

4. Special containment details:

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5. Other data:

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END 00850



DIVISION I - GENERAL REQUIREMENTS  
Section 01010 - Project Summary

The General Conditions, Supplementary Conditions and Division 1 General Requirements are hereby made a part of each division and section of the project specifications.

**1. GENERAL**

**1.01. REQUIREMENTS INCLUDE**

- A. Work covered by Contract Documents: Asbestos Abatement Work at Krug Elementary School.

**1.02. RELATED REQUIREMENTS**

- A. Specified elsewhere:
  - 1. 01030 - Alternates.
  - 2. 01410 - Testing and Asbestos Project Management Services.
  - 3. 02080 - Definitions for Asbestos Removal Work.

**1.03. DEFINITIONS.**

The following terms are used throughout the Contract Documents. The Work will be governed in accord with the definitions.

- A. Fabricated: Fabricated pertains to items specifically assembled or made of selected materials or components to meet individual design requirements.
- B. Manufactured: Manufactured means standard units, usually mass produced by an established manufacturer of the respective item.
- C. Provide: Provide means furnish and install.
- D. Shop fabricated or shop made: Shop fabricated or shop made refers to items made by the Contractor in his own shop.

**1.04. CONTRACTS**

- A. The Owner will award multiple contracts for all work specified herein. Such contract will be the Standard Form of Owner/Contractor Agreement (A.I.A. Document A101-2007 Edition).

**1.05. WORK SEQUENCE**

- A. Provide adequate manpower to maintain schedule.
  - 1. The cost of overtime work, if required to maintain progress, shall be included in the bid proposal.
  - 2. The completion schedule shall be based on the use of one (1) Asbestos Project Managers at Krug Elementary School and two (2) Asbestos Project Managers at Waldo Elementary School during the entire contract period. All project areas will be available to the Contractor twenty-four hours per day, seven days per week. Refer to Section 00800 paragraph 13.8 regarding the calculation of the number of Crew Days to be indicated on the Bid Form.

**1.06. PROJECT SCHEDULE:**

- A. MANDATORY PRE-BID MEETING: October 26, 2020 at 1:00 pm  
Krug Elementary School followed by  
Waldo Middle School
- B. BID OPENING: November 4, 2020, 10:00 am
- C. SCOPE REVIEW MEETINGS November 5, 2020, 10:00 am
- C. CONTRACT AWARD: November 16, 2020
- D. IDPH, EPA NOTIFICATIONS COMPLETE: TBA
- E. PRECONSTRUCTION MEETING: TBA

F. PROJECT SCHEDULES:

	<b>START DATE</b>	<b>COMPLETION DATE</b>
Krug Elementary School	December 18, 2020	June 15, 2021 <sup>(1)</sup>
Waldo Middle School	December 18, 2020	April 12, 2021 <sup>(1)</sup>

(1) - See Phasing Schedule in Drawings for Detailed breakdown

**1.07 CONTRACTOR USE OF PREMISES**

- A. Confine operations at site to areas permitted by:
  - 1. Law;
  - 2. Permits;
  - 3. Contract; and
  - 4. Owner's representative.
    - a) Confer with Owner's representative and obtain full knowledge of all site rules and regulations affecting work.
    - b) Conform to site rules and regulations while engaged in project construction.
    - c) Site rules and regulations take precedence over others that may exist outside such jurisdiction.
    - d) Employee List: The Owner's representative may examine Contractor's list of employees, including those of his subcontractors and their agents.
    - e) Vehicle use: Rigidly enforce the following:
      - 1) Keep all vehicles, mechanized or motorized equipment locked at all times when parked and unattended on Owner's premises.
      - 2) Do not, under any circumstance, leave any vehicle unattended with motor or engine running, or with ignition key in place.

- 3) All traffic control subject to Owner's representative's approval.
- B. Do not unreasonably encumber site with materials or equipment.
- C. Assume full responsibility for protection and safekeeping of products stored on premises.
- D. Move all stored products or equipment that interferes with operations of Owner or other contractors.
- E. Obtain and pay for use of additional storage or work area needed for operations.
- F. Limit use of site for Work.
  - 1. To areas approved in advance by Owner.

**1.08. DUTIES OF CONTRACTOR**

- A. Except as specifically noted, provide and pay for:
  - 1. Labor, materials and equipment.
  - 2. Tools, construction equipment and machinery.
  - 3. Water, heat and utilities required for abatement.
  - 4. Other facilities and services necessary for proper execution and completion of work.
- B. Secure and pay for as necessary for proper execution and completion of work, and as applicable at time of receipt of bids:
  - 1. Permits;
  - 2. Government Fees; and
  - 3. Licenses.
- C. Give required notices.
- D. Comply with codes, ordinances, rules, regulations, orders and other legal requirements of public authorities which bear on performance of Work.
- E. Promptly submit written notice to Asbestos Project Designer of observed variance of Contract Documents from legal requirements. It is not Contractor's responsibility to make certain that Drawings and Specifications comply with Codes and regulations.
- F. Enforce strict discipline and good order among employees.
  - 1. Contractor must have an English-speaking person on site at all times.
- G. This Project is exempt from all State and Local use taxes. Proceeds from the end-use or consumption items to construction contractors to perform real estate construction contracts for the State of Illinois and its political subdivisions are taxable.
  - 1. Obtain sales tax exemption certificate number from Owner.
  - 2. Place exemption certificate number on invoices for materials incorporated in work.

3. Furnish copies of invoices to Owner.
  4. Upon completion of work, file with Owner, notarized statement that all purchases made under exemption certificate were entitled to be exempt.
  5. Pay legally assessed penalties for improper use of exemption certificate number.
- H. Purchase and maintain insurance in accordance with the General and Supplementary Conditions.
- I. Provide bonds for the work.

**1.09. TIME OF COMPLETION AND OCCUPANCY**

- A. The date of Completion of each phase of removal shall be no later than indicated in Paragraph 1.06. Project Schedule.

**1.10. PROJECT SECURITY**

- A. Take necessary precautions (barriers and/or fenced off areas) to protect Owner's personnel, pedestrians, in the area of demolition or construction.
- B. Securely close-off all areas of construction after working hours to prevent entry by unauthorized personnel.
- C. Notify fire department and police department of alarm systems disablement.

**1.11. VARIANCE FROM IDPH REGULATIONS**

- A. The Owner will not request variances from the Illinois Department of Public Health.

**1.12. PROJECT LIMITATIONS**

- A. Owner will vacate affected area of building and will remove all furniture and office equipment prior to the start of work under this contract.
- B. Phased Construction:
1. General construction work will commence prior to final completion. Abatement contractors' technical proposal shall indicate areas and dates for release to reconstruction contractor. Refer to Paragraph 1.06 Project Schedule for required completion date.

END 01010.

**1. GENERAL**

**1.01. REQUIREMENTS INCLUDE**

- A. General Contractor: Provide unit prices in Bid Form for specified items.

**1.02. RELATED REQUIREMENTS**

- A. Specified elsewhere:
  - 1. 01370 - Schedule of Values.
  - 2. 01700 - Contract Closeout.
  - 3. 02080 - Asbestos Abatement

**1.03. DEFINITIONS**

- A. Unit Price: Unit price means a fixed price, including all overhead, profit and all other cost of whatever nature and character, for a specified unit of work. Unit prices in the Bid Form, when accepted by the Owner and incorporated into the Contract, shall be the same for additional, deducted or omitted units of work.

**2. PRODUCTS**

NOT APPLICABLE

**3. EXECUTION**

**3.01. APPLICATION**

- A. Enter unit prices for each work item in Bid Form in space provided. Omission will result in rejection of bid.
- B. Modifications to Contract amount will be made by multiplying the quantity of the change by the unit price and adding or subtracting the result from the Contract amount depending on whether the change is for additional work or for deducted or omitted work respectively.

**3.02. UNIT PRICE ITEM SCHEDULE**

- A. Unit Price 1: Cost to remove and dispose of additional floor tile and mastic, mastic must be removed by mechanical means:
- B. Unit Price 2: Cost to remove and dispose of additional pipe insulation using the glovebag method inside a negative pressure mini containment exclusive of cost to construct mini containment and remote worker decontamination chamber:
- C. Unit Price 3: Cost to construct a remote decontamination chamber associated with Unit Cost 2:
- D. Unit Price 4: Cost to construct mini containment associated with Unit Price 2 and 3

END 01026.

**1. GENERAL**

**1.01. REQUIREMENTS INCLUDE**

- A. Comply with procedures described in this Section when applying for progress payment and final payment under the Contract.

**1.02. RELATED REQUIREMENTS**

- A. 00500 - Owner-Contractor Agreement (A.I.A. Document No. A101-2007, as amended by Owner).
- B. 00700 - General Conditions (A.I.A. Document No. A201-2007, as amended by Owner).
- C. 00800 - Supplementary Conditions.
- D. 01028 - Change Order Procedures.
- E. 01370 - Schedule of Values.
- F. 01700 - Contract Closeout.

**1.03. QUALITY ASSURANCE**

- A. Prior to the start of construction, secure the Asbestos Project Designer's approval of the Schedule of Values required to be submitted by the General Conditions, the Supplementary Conditions and Section 01370.
- B. During progress of the Work modify the Schedule of Values as approved by the Asbestos Project Designer to reflect changes in the Contract Sum due to Change Orders or other modifications to the contract.
- C. Base requests for payment on the approved Schedule of Values.
- D. The Asbestos Project Designer's approval of application for final payment may be contingent upon the Asbestos Project Designer's approval of the Contractor's progress toward maintaining the construction schedule described in 01310.

**1.04. SUBMITTALS**

- A. Informal submittal: Unless otherwise directed by the Asbestos Project Designer, the Contractor must:
  - 1. Make an informal submittal of request for payment by filling in, with erasable pencil, pertinent portions of AIA Document No. G702, "Application and Certificate for Payment" plus continuation sheet or sheets.
  - 2. Make this preliminary submittal to the Asbestos Project Designer five business days prior to the last regular job meeting of each month.
  - 3. Revise the informal submittal of request for payment as agreed at the job meeting, initialing all copies.
- B. Formal submittal: Unless otherwise directed by the Asbestos Project Designer, the Contractor must:

1. Make formal submittal of request for payment by filling in the agreed data, by typewriter or neat lettering in ink, on AIA Document G702, "Application and Certificate for Payment" plus continuation sheet or sheets.
2. Sign and notarize the Application and Certificate for Payment.
3. Submit the original of the Application and Certificate for Payment, plus three identical copies of the continuation sheet or sheets, to the Asbestos Project Designer.
4. The Asbestos Project Designer will compare the formal submittal with the approved informal submittal and, when approved, will issue a Certificate for Payment.
5. With the Application for Payment for progress payments, submit the Contractor's partial waiver of lien for the full amount of the progress payment and partial waivers of lien for all subcontractors for the full amount of the progress payment made on the previous application.
6. With the final Application for Payment, submit the Contractor's final waiver of lien in the amount of the total adjusted contract sum and a final waiver of lien for each subcontractor in the amount of the respective adjusted contract sum for each subcontractor.

END 01027.

**1. GENERAL**

**1.01. See the General Conditions for Change Order requirements.**

**1. GENERAL**

**1.01. REQUIREMENTS INCLUDE**

- A. Promptly implement Change Order procedures.
  - 1. Provide full written data required to evaluate changes.
  - 2. Maintain detailed records of work done on time-and-material/force account basis.
  - 3. Provide full documentation to Asbestos Project designer on request.
- B. Designate in writing member of Contractor's organization:
  - 1. Who is authorized to accept changes in Work
  - 2. Who is responsible for informing others in Contractor's employ of authorization of changes in Work.
- C. Owner designates in writing person authorized to execute Change Orders.

**1.02. RELATED REQUIREMENTS**

- A. 00500 - Owner-Contractor Agreement (A.I.A. Document No. A-101, 2017 Edition).
- B. Conditions of Contract:
  - 1. 00700 - General Conditions (A.I.A. Document No. A-201, 2017 Edition).
  - 2. 00800 - Supplementary Conditions.
- C. 01027 - Applications for Payment.
- D. 01600 - Material and Equipment.

**1.03. CHANGE ORDER PROCEDURE**

- A. Initiation of Contract Changes:
  - 1. Requests for change may be initiated either verbally or in writing.
  - 2. Subcontractors initiating a request for change shall direct their requests to their Contractor.
  - 3. The Asbestos Project Designer will direct their requests for change to the Owner's Representative.
- B. Owner's Representative Authorizes:
  - 1. The Owner's Representative, having considered the necessity of the request change and availability of funds will authorize the Asbestos Project Designer to prepare a request for proposal (RFP).



C. Asbestos Project Designer Prepares Request for Proposal:

1. The Asbestos Project Designer, following consultation with the General Contractor regarding contracts which will be affected by the proposed change, will prepare a RFP for each contract affected.
2. Two sets of the RFP and Supplemental Drawings and Specifications for each contract are transmitted to the General Contractor: One set for the Contractor whose work is affected and one set for the General Contractor

D. Contractors Prepare Proposals:

1. Detailed Breakdown of Material Equipment and Labor:

- a) The Contractor or Subcontractor whose work is affected by a proposed change shall prepare a proposal for change.
- b) The detailed breakdown shall be prepared in accordance with the Contract Documents.
  - 1) If a change affects work covered by unit prices in the contract, such prices shall be used as the basis for adjustments to the contract sum.
  - 2) In all other cases, adjustments to the contract sum shall be based on the Contractor's direct cost, including costs of material, labor, equipment, bonds and taxes as applicable.
  - 3) Labor rates shall be itemized on the detailed breakdown indicating the trade base wage rate, total union fringe benefits, FICA, unemployment compensation insurance and workmen's compensation insurance. Labor rates shall not include any inefficiencies of construction or labor.
    - I. Value of a change: If a change affects work covered by unit prices in the Contract, such unit prices shall be used as the basis for adjustments to the contract sum.
    - II. Except as otherwise specified, in all other cases, adjustments to the contract shall be based on the Contractor's direct costs, including-costs of material, labor, workmen's compensation insurance, equipment, bonds and taxes as applicable plus an amount of 15% for overhead and profit except that no overhead and profit shall be deducted from the price for changes deleting work. If the changed work is performed by a subcontractor, 15% shall be added to the subcontractor's costs for overhead and profit, an additional 5% shall be included for the Prime Contractor's overhead and profit and a further 5% shall be included for each intermediate subcontractor, if any, between the Contractor and the subcontractor performing the changed work.

E. Asbestos Project Designer Reviews:

1. The Asbestos Project Designer reviews the Contractor's proposals for completeness and conformance with the RFP and Contract Documents. Proposals which are incomplete or have inadequate detailed breakdowns will be returned to the Contractors for resubmissions.
2. The Asbestos Project Designer will review and approve all price proposals.

Recommending issuance of a change order will be construed to mean that the Asbestos Project Designer has reviewed all quantities, prices and other data contained in the contractor's proposal and has found such to be reasonable and in conformance with the provisions of the Contract Documents.

F. Asbestos Project Designer Issuance of a Change Order:

1. The Asbestos Project Designer, having received what it believes to be appropriate and acceptable Contractor proposals for the proposed change, will recommend issuance of a Change Order.
2. The change order package prepared by the Asbestos Project Designer shall contain the following items:
  - a) Three originals of the RFP Proposal and change order all with original signatures.
  - b) As applicable one copy of drawings and specifications.
  - c) On changes initiated by the Asbestos Project Designer a letter explaining the circumstances related to the need for the change.
  - d) On Owner requested change orders, a letter of request signed by the Owner's Representative.
  - e) Change Order Authorization Form for Owner's Signature and permanent record in accord with Public Act 85-1295.

G. Owner Approves (Disapproves) Change Order: For change in Contract Sum and/or Contract Time.

**1.04. PREPARATION OF CHANGE ORDERS**

- A. Asbestos Project Designer will prepare each Change Order.
- B. Change Order describes change in Work, both additions and deletions, with attachments of revised Contract Documents to define details of change.
- C. Change Order provides accounting of adjustment in Contract Sum and in Contract Time.

**1.05. CORRELATION WITH CONTRACTOR'S SUBMITTALS**

- A. Periodically revise Schedule of Values and Request for Payment forms to record each change as separate item of Work and to record adjusted Contract Sum.
- B. Periodically revise Construction Schedule to reflect each change in Contract Time.
  1. Revise sub-schedules to show changes for other items of work affected by changes.
- C. Upon completion of work under Change Order, enter pertinent changes in Project Record Documents.

END 01028.

**1. GENERAL**

**1.01. GENERAL REQUIREMENTS**

Contractor must:

- A. Perform all portions of the work affected by this Section in accordance with the requirements of the Contract Documents.
- B. Comply with requirements relative to materials and workmanship contained in the respective specification sections.
- C. Include modifications of work or additional work incidental thereto, which may be required when an Alternate is accepted.
- D. The Owner may accept any Alternate prior to such time as will entail extra cost in its execution.
- E. State the amounts of Alternate Prices to be added to or deducted from the Base Bid on the Bid Form.
- F. Alternate bids shall not be considered unless requested by the Owner. An alternate bid shall not become a part of the Contract unless approved by the Owner in writing during or after the award.

**1.02. SCHEDULE OF ALTERNATES**

Krug Elementary School Alternate No. 1

- 1. Removal and Disposal of approximately 60SF of floor tile and mastic using mechanical means in rooms identified by keynote A and 4 on drawing ASB-01

Krug Elementary School Alternate No. 2

- 2. Non-friable removal and disposal of approximately 150SF of floor tile and mastic in rooms identified by keynote A and 4 on drawing ASB-01.

Krug Elementary School Alternate No. 3

- 3. Removal and disposal of approximately 150SF of floor tile and mastic using mechanical means in rooms identified by keynote A and 4 on drawing ASB-01

Krug Elementary School Alternate No. 4

- 4. Removal and disposal of floor tile and mastic using mechanical means from the entire room and the removal of sink cabinets and sinks with ACM coating from rooms 02, 03, 04, 05, 06, 07, 20 and 21.

and

Removal and disposal of the sink cabinet, sink with ACM coating and ACM floor tile and mastic under cabinet from room 01.

and

Removal and disposal of sink cabinets and sinks with ACM coating from rooms 16, 17, 18 and 19 using the mini-containment method.

Waldo Middle School Alternate No. 1

1. Removal and disposal of asbestos containing 1x1 tile and adhesive from 2<sup>nd</sup> and 3<sup>rd</sup> Floor Corridor. (Plaster to remain).

Waldo Middle School Alternate No. 2

2. Removal and disposal of linoleum flooring with underlying asbestos containing 9"x9" floor tile and mastic from the entire area of Room 111 and 112.

Waldo Middle School Alternate No. 3

3. All Base Bid Work shall start on December 18, 2020 and shall be completed by January 17, 2021 (except the exterior, boiler room, chimney, band room and LRC which will be completed by April 12, 2021).

Waldo Middle School Alternate No. 4

4. All Base Bid Work, Alternate #1 and Alternate #2 shall start on December 18, 2020 and shall be completed by January 17, 2021 (except the exterior, boiler room, chimney, band room and LRC which will be completed by April 12, 2021).

Waldo Middle School Alternate No. 5

5. Base Bid Work includes selective demolition of the boilers to provide access for sampling by others. Alternate 5 includes the cost to complete full containment removal and disposal of identified ACM from the boiler interior. All boiler components to be disposed by others.

END 01030.

**1. GENERAL**

**1.01. DUTIES OF CONTRACTOR**

- A. Coordinate work of all subcontractors.
- B. Establish on-site lines of authority and communication; schedule and conduct project meetings among:
  - 1. Owner's Representative.
  - 2. Asbestos Project Designer.
  - 3. Other Contractors.
- C. Administer processing of:
  - 1. Shop drawings, product data and samples.
  - 2. Field drawings.
  - 3. Coordination drawings.
- D. Maintain Reports and Records at Job Site:
  - 1. Daily log of progress of work, available to Asbestos Project Designer and Owner.
  - 2. Verify that all contractors maintain record documents on a current basis.
  - 3. At completion of Project, assemble record documents from all contractors and deliver to the Asbestos Project Designer.
  - 4. Assemble documentation for handling of claims and disputes.
- E. Verify that specified cleaning is done:
  - 1. During progress of work.
  - 2. At completion of each Contract.
- F. Start-Up:
  - 1. Direct and check-out of utilities, operational systems and equipment.
  - 2. Record dates of start of operation of systems and equipment.
- G. Substantial Completion:
  - 1. Upon Contractor's determination of Substantial Completion of work or portion thereof, prepare, or cause to be prepared for Asbestos Project Designer, a list of incomplete or unsatisfactory items.
  - 2. Upon Asbestos Project Designer's Certification of Date of Substantial Completion, supervise correction and completion of work.

H. Final Completion:

1. Upon Contractor's determination that Work is finally complete:
  - a) Submit written notice to Asbestos Project Designer and Owner, that Work is ready for final inspection.
  - b) Secure and transmit to Asbestos Project Designer required closeout submittals.
2. Turn over to Owner:
  - a) Warranties and Bonds.
  - b) Extra stock.

END 01040.

**1. GENERAL**

**1.01. REQUIREMENTS INCLUDE**

- A. Comply with all laws, rules and regulations applicable to the work.
  - 1. When contractor observes that Contract Documents are at variance with specified codes, notify Asbestos Project Designer in writing immediately. Asbestos Project Designer will issue all changes in accordance with General Conditions.
  - 2. When contractor performs any work knowing or having reason to know that the work is contrary to such laws, rules and regulations and fails to so notify the Asbestos Project Designer/Engineer, Contractor shall pay all costs arising therefrom. However, it will not be the Contractor's primary responsibility to make certain that the Contract Documents are in accordance with such laws, rules and regulations.

**1.02. RELATED REQUIREMENTS**

- A. Specified elsewhere.
  - 1. 01010 - Project Summary.

**1.03. DEFINITIONS AND ABBREVIATIONS**

- A. Definitions:
  - 1. Codes: Codes are rules, regulations or statutory requirements of government agencies.
  - 2. Standards: Standards are requirements set by authorities, custom or general consent and established as accepted criteria.
- B. Abbreviations:
  - 1. AHERA Asbestos Hazard Emergency Response Act.
  - 2. ANSI American National Standards Institute.
  - 3. ASHRAE American Society of Heating, Refrigeration and Air-Conditioning Engineers.
  - 4. CDB Capital Development Board.
  - 5. CPSC Consumer Product Safety Commission (Federal).
  - 6. IDOL Illinois Department of Labor.
  - 7. IDPH Illinois Department of Public Health.
  - 8. IEPA Illinois Environmental Protection Agency.
  - 9. ISBE Illinois State Board of Education.
  - 10. NFPA National Fire Protection Association.
  - 11. UL Underwriters Laboratories, Inc.

## 1.04. REGULATORY REQUIREMENTS

### A. Source and requirements, including current amendments:

1. IDPH: Illinois Plumbing Code, 1983, Cir. 4.201.
2. IDPH:
  - a) Commercial and Public Buildings Asbestos Abatement Act (Illinois Revised Statutes, (225ILCS207.)
  - b) Rules and Regulations for the Asbestos Abatement Act - Title 77, Ch. I, Subch. P. Part 855.
3. IEPA: (Current editions at date of Contract Documents.)
  - a) Air Pollution Standards.
  - b) Noise Pollution Standards.
  - c) Water Pollution Standards.
  - d) Public Water Supplies.
  - e) Solid Waste Standards.
  - f) Illinois Recommended Standards for Sewage Work.
4. Illinois Purchasing Act, as amended (Illinois Revised Statutes, Ch. 127, Par. 132.1 et seq.)
5. OSFM:
  - a) Gasoline and Volatile Oils (Illinois Revised Statutes, Ch. 17 1/2, Par. 31 et seq.).
  - b) Liquefied Petroleum Gases (Illinois Revised Statutes, Ch. 104, Par. 119 et seq.).
  - c) Liquefied Petroleum Gas Containers (Illinois Revised Statutes, Ch. 104, Par. 113 et seq.).
  - d) Illinois Rules and Regulations for Fire Prevention and Safety, as amended 24 DEC 73. (Except IOE.).
  - e) Illinois Fire Prevention and Safety Laws and Fire Protection District Laws.
6. STANDARDS:
  - a) NFPA: National Fire Codes, 1987.
    - 1) No. 70-87, National Electrical Code.
    - 2) No. 101-81, Life Safety Code, Chapter 15.
7. ISBE:
  - a) Efficient and Adequate Standards for the Construction of Schools, Cir. Series A-156, Revised 1974 (New Buildings and New Additions).



- b) Building Specifications for Health and Safety in Public Schools, Cir. Series A-157, Revised 1974 (For Life Safety Survey of Buildings Built prior to 1955).

8. USEPA:

- a) CFR Part 763, and as amended (AHERA).
- b) CFR Part 61, and as amended (NESHAP).

- B. The Asbestos Project Designer may reference other codes or standards throughout the Project Manual when deemed appropriate for proper compliance with regulatory requirements. See Section 02080, 1.04. for codes and regulations that apply specifically to asbestos work.

END 01060.

**1. GENERAL**

**1.01. REQUIREMENTS INCLUDE**

- A. Each Contractor must:
1. Attend specified meetings.
  2. Ensure attendance of subcontractors and suppliers at meetings as specified or directed.

**1.02. RELATED REQUIREMENTS**

- A. Specified elsewhere:
1. 01010 - Project Summary.
  2. 01310 - Construction Schedules.
  3. 01370 - Schedule of Values.

**1.03. PRECONSTRUCTION MEETING**

- A. Owner will schedule a preconstruction meeting within ten business days after Notice of Award. Coordinate with specified date of submittal of construction schedule (01310), and other initial submittals.
- B. Attendance:
1. Asbestos Project Designer.
  2. Contractor's Supervisor for each school (MANDATORY)
  3. Asbestos Project Manager.
  4. Air Sampling Professional.
- C. Minimum Agenda:
1. Distribute and discuss:
    - a) Diagram of workplace practices and equipment.
    - b) Tentative construction schedule.
  2. Critical work sequencing.
  3. Designation of responsible personnel.
  4. Interrelation and coordination of activities.
  5. Establish chain of authority.
  6. Processing of field decisions and change orders.
  7. Adequacy of distribution of Contract Documents.

8. Submittals:
  - a) Schedules.
  - b) Shop drawings, product data and samples.
  - c) Test reports.
  - d) Manufacturer's certification of products.
  - e) Schedule of values.
  - f) Manpower reports.
9. Major equipment deliveries and priorities.
10. Procedures for maintaining record documents.
11. Use of premises:
  - a) Decontamination and waste out areas.
  - b) Access.
  - c) Owner's requirements.
12. Safety and first aid procedures.
13. Security procedures.
14. Housekeeping procedures.

#### **1.04. COORDINATION/PAYMENT MEETINGS**

- A. Asbestos Contractor will schedule and administer coordination meetings at least weekly.
  1. Prepare agenda.
  2. Distribute written notice and agenda of meetings 5 business days in advance of meeting date.
  3. Make physical arrangements for meetings.
  4. Preside at meetings.
  5. Record minutes; include significant proceedings and decisions.
  6. Distribute copies of minutes of meetings to participants, and Owner within four business days after meetings.
- B. Attendance:
  1. Asbestos Project Manager.
  2. Project Supervisor.
  3. Air Sampling Professional.

C. Minimum agenda:

1. Review, approve minutes of previous meeting.
2. Review work progress since last meeting.
3. Review applications for payment.
4. Identify problems which impede planned progress.
5. Develop corrective measures and procedures to regain planned schedule.
6. Discuss maintenance of abatement schedule.
7. Plan progress during next work period.
8. Review submittal schedules, expedite as required to maintain schedule.
9. Maintaining of quality and work standards.
10. Review changes proposed by Owner for:
  - a) Effect on abatement schedule.
  - b) Effect on completion date.
11. Complete other current business.
12. Payment Requests.

END 01200.

**1. GENERAL**

**1.01. REQUIREMENTS INCLUDE**

- A. Asbestos Contractor: Submit master schedule to Asbestos Project Designer/Engineer within 10 business days after pre-construction meeting.

**1.02. RELATED REQUIREMENTS**

- A. Specified elsewhere:
  - 1. 01010 - Project Summary
  - 2. 01200 - Project Meetings.
  - 3. 01370 - Schedule of Values.

**1.03. FORM OF SCHEDULES**

- A. Prepare a standard horizontal bar chart
  - 1. Provide separate horizontal bar column for each class of work, activity or long-lead equipment item.
  - 2. Order: Table of contents of specifications.
  - 3. Identify each column.
    - a) By major specification number.
    - b) By distinct graphic delineation.
  - 4. Horizontal time scale: Identify first work day of each month.
  - 5. Scale and spacing: To allow space for updating.
- B. Sheet Size:
  - 1. Minimum: 11" x 8-1/2"
  - 2. Maximum 42" x 30"

**1.04. CONTENT OF SCHEDULES**

- A. Indicate complete sequence of construction by activity.
  - 1. Product procurement date, fabrication time and delivery dates.
  - 2. Dates for beginning, and completion of, each element of construction.
- B. Identify work of construction site.
- C. Indicate cumulative percentage of work completed as of first day of each month.
- D. Furnish separate schedule, showing submittals, review items, procurement schedules and

delivery dates as specified in 1.03.A.

E. Define critical portions of entire schedule.

**1.05. SUBMITTALS**

- A. Submit initial schedules within 10 business days after date of pre-construction meeting.
  - 1. Asbestos Project Designer/Engineer will review schedules and return reviewed copy within 10 business days after receipt.
  - 2. When directed, re-submit within five business days after return of reviewed copy.
- B. Submit the number of copies required by Contractor, plus two copies to be retained by Asbestos Project Designer/Engineer and two copies to Owner. Furnish additional copies when directed.

**1.06. DISTRIBUTION**

- A. Distribute copies of reviewed schedules to:
  - 1. Job site file.
  - 2. Subcontractors and suppliers on as-needed basis.
  - 3. Asbestos Project Designer/Engineer.
  - 4. Owner.
- B. Instruct recipients to report inability to comply with projected completion dates, and to furnish a detailed explanation together with suggested remedies.

END 01310.

**1. GENERAL**

**1.01. REQUIREMENTS INCLUDE**

- A. Submit Schedule of Values to Asbestos Project Designer at least 15 business days prior to submitting first application for payment.
- B. Support values given with data to substantiate their correctness.
- C. Submit quantities of designated materials.
- D. List quantities of materials specified under unit prices.
- E. Use Schedule of Values as only basis for application for payment.
- F. Payment for materials stored on or off site will be limited to those materials listed in Schedule of Values.

**1.02. RELATED REQUIREMENTS**

- A. Specified elsewhere:
  - 1. 01310 - Construction Schedules.

**1.03. FORM OF SUBMITTAL**

- A. Submit typewritten Schedule of Values on 8-1/2" x 11" paper.
- B. Use Project Manual Table of Contents as basis of format for listing costs of all work.
- C. Identify each line item with number and title listed Project Manual table of contents.

**1.04. PREPARATION**

- A. Itemize separate line cost for each of following cost items:
  - 1. Overhead and profit.
  - 2. Bonds.
  - 3. Insurance.
  - 4. General Requirements.
- B. Itemize separate line item cost for work specified in each section of the specifications. Identify work of:
  - 1. Contractor's own labor forces.
  - 2. All subcontractors.
  - 3. All major suppliers of products-or equipment.
- C. Break down installed costs into:
  - 1. Delivered cost of product, with taxes paid.

2. Labor cost, excluding overhead and profit.

END 01370.



DIVISION I - GENERAL REQUIREMENTS  
Section 01410 - Testing Laboratory Services

**1. GENERAL**

**1.01. REQUIREMENTS INCLUDE**

- A. Owner will employ and pay for an independent testing laboratory and Asbestos Project Manager to perform specified services.
- B. Employment of testing laboratory will in no way relieve Contractor's obligations to perform work in accordance with the Contract.
- C. The Owner will assign an Asbestos Project Manager and Air Sampling Professional on-site at all times when abatement activities are in progress including, but not limited to, site preparation, containment construction, abatement, cleaning, clearance activities, teardown and disposal activities.
- D. The completion schedule shall be based on the use of two (2) Asbestos Project Manager during the entire contract period. All project areas will be available to the Contractor twenty four hours per day, seven days per week. Refer to Section 00800 paragraph 13.8 regarding the calculation of the number of Crew Days to be indicated on the Bid Form.

**1.02. LABORATORY DUTIES - LIMITS OF AUTHORITY**

A. General:

- 1. Throughout the entire removal and cleaning operations, air monitoring shall be conducted by the Owner's laboratory to ensure that the Contractor is complying with EPA and OSHA regulations and any applicable state and local government regulations. Air monitoring will be conducted according to the method prescribed by 29 CFR 1926.1101, Appendix A or applicable state or local regulations.

B. Monitoring Prior to Actual Removal:

- 1. The environmental health testing laboratory will provide area monitoring and establish the reference baseline ambient fiber concentration levels one day prior to the masking and sealing operations for each removal site. One sample minimum per site or per 50,000 cubic feet of airspace.

C. Monitoring During Asbestos Removal:

- 1. The environmental health testing laboratory will provide quality control personal and air monitoring during exposure to airborne concentrations of asbestos. Thereafter, providing the same type of work is being performed, the environmental health testing laboratory will provide area monitoring once every four hours during the work shift inside the asbestos control area, once every eight hours outside the entrance to the asbestos control area, and once every eight hours near the discharge of the local exhaust system.

E. Monitoring Results:

- 1. PCM fiber counting shall be completed and results reviewed by the environmental health testing laboratory within 24 hours and have a 12-hour turn-around time for final compliance monitoring. The environmental health testing laboratory shall notify the Contractor and the Owner immediately of any exposures to asbestos fibers in excess of the acceptable limits.

F. AHERA Clearance Monitoring:

1. Final air monitoring for functional spaces per CFR 763.90 having more than 160 square feet or 260 linear feet of asbestos-containing building material (ACBM) shall be conducted in compliance with EPA criteria. Clearance Air monitoring shall utilize TEM laboratory analysis for establishing fiber levels, based on a 6-hour turnaround.

G. Laboratory is not authorized to:

1. Release, revoke, alter or enlarge on, contract requirements.
2. Approve or accept any portion of work.
3. Perform any duties of the Contractor.

**1.03. CONTRACTOR'S RESPONSIBILITIES**

A. The Contractor shall be responsible for providing personal monitoring of his employees as per OSHA 1926.1101.

B. AHERA Compliance - Functional Space:

1. The number of functional spaces as defined by 40 CFR 763.90 having more than 160 square feet or 260 linear feet of asbestos-containing building material (ACBM) for a given project shall be determined by the Designer.
2. Contractor coordinate work this number of functional spaces. Any additional air monitoring that is a result of the Contractor exceeding this number shall be the responsibility of the Contractor.

C. Furnish casual labor and facilities:

1. To provide access to work to be tested.
2. To obtain and handle samples at site.
3. To facilitate inspections and tests.
4. For laboratory's exclusive use for staging of test samples.

D. Notify laboratory sufficiently in advance of operations to allow for its assignment of personnel and scheduling of tests.

E. Correct work that is defective or that fails to conform to the Contract Documents in accordance with the General Conditions. Corrective work shall not delay the project schedule or the work of other contractors.

F. Pay all costs of retesting when test results indicate noncompliance with contract requirements.

END 01410.

DIVISION I - GENERAL REQUIREMENTS  
Section 01500 - Temporary Facilities and Controls

**1. GENERAL**

**1.01. WORK INCLUDES**

- A. Abatement Contractor to provide all general services and temporary facilities as specified and as necessary for the proper and expeditious prosecution of the work.

**1.02. RELATED WORK**

- A. Specified elsewhere
  - 1. 01010 - Project Summary.

**1.03. RESPONSIBILITIES**

- A. The Abatement Contractor shall pay all costs for general services and temporary facilities including installation, operation, maintenance, fuel or energy consumed and removal of same when no longer required.
- B. Comply with applicable statutes, ordinances, building codes, Article 13, "PRECAUTIONS DURING BUILDING OPERATIONS" of the BOCA Basic Building Code and the "MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION" of the Associated General Contractor's of America, Inc., latest editions.

**1.04. ACCESS TO SITE**

- A. Obtain and pay for permits and inspections made necessary by the use of public streets, sidewalks, curbs and paving, post guarantees and bonds that may be required in connection therewith, and repair and make good any damages thereto acceptable to the authorities having jurisdiction.

**1.05. LIGHT AND POWER**

- A. All temporary equipment and wiring for power and lighting shall be in accordance with the applicable provisions of the governing codes. Maintain in a safe manner and utilize so as not to constitute a hazard to persons or property.
- B. To satisfy minimum requirements for safety and security install a lighting system which will provide general illumination of not less than five-foot candles in all areas where work is being performed. Equip all lamps with guards.
- C. Extend existing electrical service to locations required to execute the work.
  - 1. Do not overload existing circuitry.
  - 2. Provide ground fault circuit interruption at wet locations and throughout the contained work areas.
  - 3. Restore system to initial condition.
- D. All extension cords shall be furnished by the Contractor. Any subcontractor requiring special electrical power shall arrange for the installation and costs thereof with the contractor.
- E. Owner will permit temporary electrical service to be supplied from existing school electrical service. Contractor shall be responsible for all costs associated with temporary connection

and disconnection to school electrical service.

**1.06. WATER SUPPLY**

- A. Provide and maintain a temporary water service for drinking and construction purposes for all parts of the work.
  - 1. Owner will allow use of existing hose bibs for water supply at meter locations indicated.
- B. If required, provide a house pump complete with necessary operating controls, starters and switches, to supply adequate capacity with minimum 20 lb. pressure at each outlet.
- C. Contractor shall filter waste water and make suitable for discharge to sanitary sewer.

**1.07. TOILET**

- A. Provide and maintain a temporary toilet for all workmen on the project, in an enclosed structure housing IDPH approved plumbing fixtures and filtration.

**1.08. MISCELLANEOUS FACILITIES**

- A. Provide and maintain all miscellaneous temporary facilities such as ladders, ramps, scaffolds, hoists, railings, chutes, barricades, enclosures, platforms, walks, etc., as required for the proper execution of the Work.

**1.09. OPENINGS**

- A. Provide openings where required for moving in large pieces of equipment of all types. Close and restore all openings and finish them after the equipment is in place.

**1.10. PROTECTION**

- A. Employ such watchman service as necessary to properly protect and safeguard the work.
- B. The Owner shall not in any way be liable or responsible for the damage or loss to the work due to trespass or theft.

END 01500.

DIVISION I - GENERAL REQUIREMENTS  
Section 01630 - Substitutions and Product Options

**1. GENERAL**

**1.01. REQUIREMENTS INCLUDE**

- A. Base all bids on providing all products exactly as specified.
- B. For products specified only by reference or performance standards, select any product which meets or exceeds standards, by any manufacturers, subject to the Asbestos Project Designer's approval.
- C. For products specified by naming several products or manufacturers, select any product and manufacturer named.

**1.02. RELATED REQUIREMENTS**

- A. Specified elsewhere:
  - 1. 01040 - Project Coordination.

**1.03. SUBSTITUTIONS, BIDDER/CONTRACTOR OPTIONS**

- A. **PRIOR TO BID OPENING:** The Asbestos Project Designer will consider written requests to amend the Contract Documents to add products not specified provided such requests are received at least 10 calendar days prior to bid opening date. Requests received after that time will not be considered. When a request is approved, the Asbestos Project Designer will issue an appropriate addendum.
- B. **WITH BID:** A bidder may propose substitutions with his bid by completing the Substitution Sheet with the Bid Form, subject to the provisions stated thereon. Asbestos Project Designer/Engineer will review Substitution Sheet of low bidder and recommend approval or rejection by Owner prior to award of Contract.
- C. **AFTER AWARD OF CONTRACT:** No substitutions will be considered after Notice of Award except under one or more of the following conditions:
  - 1. Product discontinued.
  - 2. Insufficient quantity. Except when the trade contractor failed to award subcontract in sufficient time or failed to place orders for products so as to ensure delivery without delaying work.
  - 3. Delays beyond the reasonable control of the trade contractor, such as strikes, lockouts, storms, fires, or acts of God, which may preclude the procurement and delivery of products for purposes of the Project.

**1.04. SUBSTITUTION REQUIREMENTS**

- A. Submit 3 copies of each request for substitution. Include in request:
  - 1. Complete data substantiating compliance of proposed substitution with Contract Documents.
  - 2. For products:
    - a) Product identification, including manufacturer's name and address.

- b) Manufacturer's literature:
    - 1) Product description.
    - 2) Performance and test data.
    - 3) Reference standards.
      - I. Samples
      - II. Name and address of similar projects on which product was used and date of installation.
  - 3. For construction methods:
    - a) Detailed description of proposed method.
    - b) Drawings illustrating methods.
  - 4. Itemized comparison of proposed substitutions with product or method specified.
  - 5. Data relating to changes in construction schedules.
  - 6. Identify:
    - a) Other contract affected.
    - b) Changes or coordination required.
  - 7. Accurate cost data on proposed substitution in comparison with product or method specified.
- B. In making request for substitution, bidder/contractor represents:
- 1. He has personally investigated proposed product or method and determined that it is equal or superior in all respects to that specified
  - 2. He will provide the same guarantee or better guarantee for substitution as for product or method specified.
  - 3. He will coordinate installation of accepted substitutions into work, making all changes required for work to be complete in all respects.
  - 4. Cost data is complete and includes all related costs under his contract, but excludes:
    - a) Costs under separate contracts.
    - b) Asbestos Project Designer/Engineer's redesign.
    - c) Administrative costs of Asbestos Project Designer/Engineer.
  - 5. He will pay all additional costs and expenses for Owner, Asbestos Project Designer/Engineer and other contractors.
- C. Substitutions will not be considered when:
- 1. They are indicated or implied on shop drawings or product data submittals without formal request submitted in accordance with Paragraph 1.04.

2. Acceptance will require substantial revisions of Contract Documents, unless Contractor pays additional costs as stated in paragraph 1.04.B.5.

END 01630.

**1. GENERAL**

**1.01. REQUIREMENTS INCLUDE**

- A. Contractor:
1. Substantial completion.
  2. Final completion.
  3. Closeout submittals.
  4. Application for final payment.
  5. Final cleaning.

**1.02. RELATED REQUIREMENT**

- A. Specified elsewhere:
1. 01010 - Project Summary.
  2. 01500 - Temporary Facilities and Controls.
  3. 01710 - Final Cleaning.
  4. 01720 - Project Record Documents

**1.03. SUBSTANTIAL COMPLETION**

- A. When Contractor considers work substantially complete, submit written declaration to Asbestos Project Designer that work, or designated portion thereof, is substantially complete and in compliance with IDPH and EPA regulations.
- B. Asbestos Project Designer will make a preliminary inspection within seven business days after receipt of Contractor's declaration.
- C. Upon determining that work is substantially complete, Asbestos Project Designer will accept application for payment.

**1.04. APPLICATION FOR FINAL PAYMENT**

- A. Contractor must submit duly executed:
1. Final Affidavit and Sworn Statement.
  2. Contractor's Final Waiver of Lien.
  3. Separate releases of waivers of liens for all subcontractors, suppliers and others with lien rights against property of Owner, together with a complete list of those parties.
  4. Final accounting statement, reflecting all adjustments to contract sum.
    - a) Original contract sum.



- b) Additions and deductions resulting from:
  - 1) All change orders.
  - 2) Deductions for uncorrected work.
  - 3) Deductions for liquidated damages.
- 5. Total contract sum, as adjusted.
- 6. Previous payments.
- 7. Sum remaining due.
- B. Asbestos Project Designer will process final statement in accordance with the Conditions of the Contract..

END 01700.

**I. GENERAL**

**1.01. REQUIREMENTS INCLUDE**

- A. Provide final cleaning in addition to asbestos abatement cleaning requirements:
  - 1. At completion of work, or at such other times as necessary, remove all waste, debris, rubbish, tools, equipment, machinery and surplus materials. Clean all sight exposed surfaces; leave work clean and ready for occupancy.

**1.02. RELATED REQUIREMENTS**

- A. Specified elsewhere:
  - 1. Contract Closeout.
  - 2. Respective specification sections - cleaning for specific products or work.
  - 3. Asbestos Abatement.

**1.03. SAFETY REQUIREMENTS**

- A. Standards: Maintain project in accord with the following safety and insurance standards:
  - 1. Federal and state regulations.
  - 2. National Fire Protection Association (NFPA).
- B. Hazards Control:
  - 1. Store volatile wastes in covered metal containers and remove from premises daily.
  - 2. Prevent accumulation of wastes which create hazardous conditions.
  - 3. Provide adequate ventilation during use of volatile or noxious substances.
- C. Conduct cleaning and disposal operations to comply with Federal and State anti-pollution laws.
  - 1. Do not burn or bury rubbish and waste materials on project site.
  - 2. Do not dispose of volatile wastes such as mineral spirits, oil or paint thinner in storm or sanitary drains.
  - 3. Do not dispose of wastes into streams or waterways.

**1.04. SUBMITTALS**

- A. Manufacturer's recommendations for cleaning specified products.
- B. Proposed cleaning products for products where manufacturer's recommendations are not specified.

## **2. PRODUCTS**

### **2.01. MATERIALS**

- A. Select and use all cleaning materials and equipment with care to avoid scratching, marring, defacing, staining or discoloring surfaces cleaned.
- B. Use only cleaning materials recommended by manufacturer of surface to be cleaned.
- C. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

## **3. EXECUTION**

### **3.01. FINAL CLEANING**

- A. Employ experienced workmen or professional cleaners for final cleaning.
- B. Remove grease, dust, dirt, stains, labels, fingerprints, protection and other foreign materials from sight-exposed surfaces.
  - 1. In preparation for substantial completion or occupancy, conduct final inspection of sight-exposed surfaces, and of concealed spaces to insure performance.
- C. Repair, patch and touch up marred surfaces to specified finish, to match adjacent surfaces.
- D. Maintain finally cleaned areas until project, or designated portion thereof, is accepted by Owner.

END 01710.

**1. GENERAL**

**1.01. WORK INCLUDES**

- A. Removal of Asbestos Containing Materials
  - 1. See contract drawings.
- B. All applicable Rules and Regulations of EPA and OSHA shall be included in the required scope of work.
- C. All Rules and Regulations of the Illinois Department of Public Health shall be included in the required scope of work.
- D. Abatement Contractor provide all labor, materials, and equipment required to remove all indicated materials.
  - 1. Asbestos Abatement Contractor provide:
    - a. Certified supervision of all asbestos work.
    - b. Reports, notices and signs.
    - c. Protection of persons and property.
    - d. Worker Protection.
    - e. Work area preparation.
    - f. Complete removal of all asbestos-containing materials.
    - g. Clean up and disposal of asbestos-containing materials.
    - h. Clean up and disposal of non-ACM materials and waste.
    - i. Repair/restoration of work areas and HVAC system.
- E. The abatement work comprises removal of asbestos containing materials. Asbestos presents a serious health risk to humans. The work is governed by local, state and federal rules, regulations and laws. The Contractor agrees by accepting the contract that he has full responsibility for the health and safety of his staff and all people who come in contact with the work site.

**1.02. DEFINITIONS**

**"ABATEMENT"** means procedures to control fiber release from asbestos containing materials. This includes removal, encapsulation, enclosure, and repair.

**"AGGRESSIVE SAMPLING"** means a method of sampling where the person collecting the air sample creates activity during the sampling period to stir up settled dust and simulate activity of that area of the building.

**"AHERA"** means Asbestos Hazard Emergency Response Act which is a Federally mandated rule that requires Local Education Agencies, (LEA's) to identify friable and non-friable asbestos-containing material (ACM) in public and private elementary and secondary schools by visually

inspecting school buildings for such materials, sampling such materials if they are not assumed to be ACM, and having samples analyzed by appropriate techniques. The rule also requires the LEA's to submit management plans to the Governor of their State by October 12, 1988, begin to implement the plans by July 9, 1989, and complete the implementation of the plans in a timely fashion. In addition, LEA's are required to use persons who have been accredited to conduct inspections, reinspection's, develop management plans, or perform response actions. The rule also includes record keeping requirements. LEA's may contractually delegate their duties under this rule, but they remain responsible for the proper performance of those duties.

**"AIHA"** means the American Industrial Hygiene Association, 2700 Prosperity Ave., Suite 250, Fairfax, VA 22031.

**"AIRLOCK"** means a system for permitting entrance and exit 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 such that one passes through one doorway into the airlock, allowing the doorway sheeting to overlap and close off the opening before proceeding through the second doorway, thereby preventing flow-through contamination.

**"AIR SAMPLING"** means the process of measuring the fiber content of a known volume of air collected during a specified period of time. The procedure utilized for asbestos may follow the NIOSH Standard Analytical Method for Asbestos Method 7400 or transmission electron microscopy (TEM) methods in accordance with the requirements established by AHERA.

**"AIR SAMPLING PROFESSIONAL"** means the professional contracted or employed to supervise air monitoring and analysis schemes. This individual is also responsible for recognition of technical deficiencies in worker protection equipment and procedures during both planning and onsite phases of an abatement project. This individual shall be certified or core certified in the Comprehensive Practice of Industrial Hygiene and completed NIOSH Course No. 582 "Sampling and Evaluating Airborne Asbestos Dust".

**"AMENDED WATER"** means water to which surfactant has been added.

**"ANSI"** means the American National Standards Institute, 1430 Broadway, New York, New York 10018.

**"ASBESTOS PROJECT DESIGNER"** means the person, whether an architect, engineer, designer, consultant or other person, who designed the project.

**"ASBESTOS PROJECT MANAGER"** means the Illinois Department of Public Health Licensed person on site that designated by the Owner.

**"AREA AIR SAMPLING"** means any form of air sampling where the sampling device is placed at some stationary location. Area air sampling is conducted each day during an asbestos abatement project. Sampling locations include inside the work area, outside the work area, and outside the building.

**"ASBESTOS-CONTAINING MATERIAL (ACM)"** means material composed of asbestos of any type and in an amount greater than 1% by weight, either alone or mixed with other fibrous or non-fibrous materials.

**"ASBESTOS-CONTAINING WASTE MATERIAL"** means asbestos containing material or asbestos contaminated objects requiring disposal.

**"ASBESTOS WORKER"** means an individual who cleans, removes, encapsulates, hauls or disposed of asbestos material.

**"ASTM"** means the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.

**"AUTHORIZED VISITOR"** means any representative of a regulatory or other agency having jurisdiction over the project.

**"BACKGROUND LEVEL MONITORING"** means a method used to determine airborne asbestos fiber concentrations inside or outside a building prior to starting an asbestos abatement project.

**"CLEAN ROOM"** means an uncontaminated area or room which is a part of the worker decontamination enclosure with provisions for storage of workers' street cloths and protective equipment.

**"CLEARANCE AIR MONITORING"** means the employment of aggressive sampling techniques, with a volume of air collected to determine the airborne concentration of residual fibers upon conclusion of an asbestos abatement project.

**"CURTAINED DOORWAY"** means a device which consists of overlapping sheets of plastic over an existing or temporarily framed doorway.

**"DECONTAMINATION ENCLOSURE SYSTEM"** means a series of connected rooms, separated from the work area and from each other by air locks, for the decontamination of workers, materials, and equipment.

**"ENCAPSULANT (SEALANT)"** means a liquid material which can be applied to asbestos-containing material and which temporarily controls the possible 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).

**"EPA"** means the Environmental Protection Agency, 401M Street, S.W., Washington DC 20460.

**"EQUIPMENT DECONTAMINATION ENCLOSURE"** means that portion of a decontamination enclosure system designed for the controlled transfer of materials and equipment, consisting of a washroom and a holding area.

**"EQUIPMENT ROOM"** means a contaminated area or room which is part of the worker decontamination enclosure system with provisions for the storage of contaminated clothing and equipment.

**"FIXED OBJECT"** means a unit of equipment in the work area which cannot be removed from the work area.

**"HEPA FILTER"** means a high efficiency particulate absolute air filter capable of trapping and retaining 99.97% of particles (asbestos fibers) greater than 0.3 micrometers in mass median aerodynamic equivalent diameter.

**"HEPA VACUUM EQUIPMENT"** means vacuuming equipment with a high efficiency particulate absolute air filter system.

**"HOLDING AREA"** means a chamber in the equipment decontamination enclosure located between the washroom and an uncontaminated area.

**"HOMOGENEOUS WORK AREA"** means a site within the abatement work area which contains one type of asbestos-containing material and where one type of abatement is used.

**"MOVABLE OBJECT"** means a unit of equipment or furniture in the work area which can be removed from the work area.

**"NEGATIVE AIR PRESSURE EQUIPMENT"** means a portable local exhaust system equipped with HEPA filtration. The system shall be capable of maintaining a constant, low velocity air flow

into contaminated areas from adjacent uncontaminated area, creating a negative pressure differential between the outside and inside of the work area.

**"NESHAPS"** means the National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61).

**"NIOSH"** means National Institute for Occupational Safety and Health CDC - NIOSH, Building J N.E. Room 3007, Atlanta, GA 30333.

**"OSHA"** means the Occupational Safety and Health Administration, 200 Constitution Avenue, Washington, DC 20210.

**"OUTSIDE AIR"** means the air outside buildings and structures.

**"PCM"** means phase contrast microscopy which is an optical microscopic technique used for the counting of fibers in air samples, but which does not distinguish fiber types.

**"PERSONAL AIR MONITORING"** means a method used to determine employees' exposure to airborne fibers. The sample is collected outside the respirator in the worker's breathing zone. This form of sampling is required by the OSHA asbestos standards (29 CFR 1926.1101).

**"PLASTICIZE"** means to cover floors and walls with plastic sheeting as herein specified or by using spray plastics as recommended by the department.

**"REMOVAL"** means the stripping of any asbestos-containing materials from surfaces or components of a facility.

**"SHALL"** means the stated provision is mandatory.

**"SHOWER ROOM"** means a room between the clean room and the equipment room in the worker decontamination enclosure with hot and cold running water controllable at the tap and suitably arranged for complete showering during decontamination.

**"STAGING AREA"** means the area near the waste transfer airlock where containerized asbestos waste has been placed prior to removal from the work area.

**"STRUCTURAL MEMBER"** means any load-supporting member for a facility, such as beams and load-supporting walls or any non-load supporting member, such as ceilings and non-load-supporting walls.

**"SURFACTANT"** means a chemical wetting agent added to water to improve penetration.

**"SUPERVISOR"** means the Contractor or person designated as the Contractor's representative and responsible for the on-site supervision of the removal, encapsulation, or enclosure of asbestos-containing material in a facility.

**"TEM"** means transmission electron microscopy which is used to analyze clearance air samples in buildings regulated by AHERA. TEM is the only analytical method for determining airborne fiber concentration that distinguishes between asbestos and non-asbestos fibers.

**"VISIBLE EMISSIONS"** means any emissions containing particulate asbestos material that are visually detectable without the aid of instruments. This does not include condensed uncombined water vapor ....

**"WASHROOM"** means a room between the work area and the holding area in the equipment decontamination enclosure system where equipment and waste containers are wet-cleaned and/or HEPA vacuumed prior to disposal.

**"WET CLEANING"** means the process of eliminating asbestos contamination from building surfaces and objects by using cloths, mops, or other cleaning tools which have been dampened with water, and by afterward disposing of these cleaning tools as asbestos contaminated waste.

**"WORK AREA"** means designated rooms, spaces, or areas of the project in which asbestos abatement actions are to be undertaken or such may become contaminated as a result of such abatement actions. A contained work area is a work area which has been sealed, plasticized, and equipped with a decontamination enclosure system. A non-contained work area is an isolated or controlled-access work area which has not been plasticized or equipped with a decontamination enclosure system.

**"WORKER DECONTAMINATION ENCLOSURE SYSTEM"** means that portion of a decontamination enclosure system designed for controlled passage of workers, and other personnel and authorized visitors, typically consisting of a clean room, a shower room and an equipment room separated from each other and from the work area by airlocks, and curtained doorways.

### **1.03. QUALITY ASSURANCE**

#### **A. Abatement Contractor Qualifications:**

1. IDPH Registration
2. Experience in asbestos abatement projects of similar complexity.
3. Other relevant qualifications.
4. Submit a written description of abatement experience in the state of Illinois.

#### **B. Asbestos Abatement Contractor provide personnel with the following minimum qualifications; in accordance with IDPH Rules and Regulations:**

1. Asbestos Project Supervisor:
  - a. IDPH Licensed asbestos worker.
  - b. Minimum two years experience in supervising projects of similar complexity.
  - c. OSHA Certified competent person 1926.11012.
2. Asbestos Workers:
  - a. IDPH Licensed Asbestos Worker.

#### **C. The Owner will employ a full time Asbestos Project Manager/Air Sampling Professional on the site at all times during the performance of all asbestos work. The duties and responsibilities of the APM/ASP shall be as specified in the IDPH Rules and Regulations.**

### **1.04. INCORPORATION BY REFERENCE-FEDERAL REGULATIONS AND OTHER STANDARDS**

- A. All citations to Federal regulations in this Part concern the specified regulation in the current Code of Federal Regulations, unless another date is specified.
- B. All incorporations by reference of Federal regulations and the standards of nationally recognized organizations refer to the regulations and standards on the date specified and any additions or deletions subsequent to the date specified.



- C. The Contractor shall comply with the following Federal and State regulations and referenced standards:
1. Title 40, Code of Federal Regulations, Part 763, Asbestos-Containing Materials in Schools; U.S. Environmental Protection Agency (1987).
  2. Rules & Regulations for the Asbestos Abatement Act, as amended (77 Illinois Administrative Code, ch. I: Department of Public Health (IDPH) Subchapter p: Hazardous and Poisonous Substance, Part 855, Asbestos Abatement for Public and Private Schools in Illinois.
  3. Ill. Adm. Code Parts 175 and 185.
  4. Title 29, Code of Federal Regulations, Section 1926.1101 Occupational Safety and Health Administration (OSHA), U.S. Department of Labor (1987).
  5. Title 29, Code of Federal Regulations, Section 1910.134, General Industry Standard for Respiratory Protection (1985).
  6. Title 40, Code of Federal Regulations, Part 61, National Emission Standards for Hazardous Air Pollutants (NESHAPS), U.S. Environmental Protection Agency (EPA) (1990).
  7. Guidance for Controlling Asbestos-Containing Materials in Buildings, EPA Report No. 560/5-83-002 (1985).
  8. National Electric Code, 1984 Ed., National Fire Protection Association, Quincy, MA 02157.
  9. Compressed Gas Association Commodity Specification, G-7.1 (1966).
  10. American National Standard Practices for Respiratory Protection, ANSI Z88.2 (1980).
  11. American National Standard Fundamentals Governing the Design and Operation of Local Exhaust Systems, ANSI Z29.2 (1971).
  12. National Institute of Occupational Safety and Health, Manual of Analytical Methods (Method 7400) (1987).
  13. Environmental Protection Agency, Electron Microscope Measurement of Airborne Asbestos Concentrations, Report No. 600/2-77-178 (1977).
  14. Environmental Protection Agency, Methodology for the Measurement of Airborne Asbestos by Electron Microscopy, Contract No. 68-02-3266 (1984).

#### **1.05. SUBMITTALS AND NOTICES**

- A. In accordance with Section 855.350 of the Illinois Asbestos Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois.
- B. All notifications shall be received two weeks (10 working days or 14 calendar days) prior to commencement of the work. The contractor shall submit the following items to the Asbestos Project Manager, the U.S. and Illinois Environmental Protection Agencies and the Illinois Department of Public Health:
  1. A copy of the Notice of Asbestos Abatement Form provided by the Illinois Department of Public Health for all projects in K-12 schools, or a copy of the

notification form provided by the Illinois Department of Public Health for projects in public and commercial buildings.

2. A copy of the demolition/renovation notice shall be submitted as required by Title 40, Code of Federal Regulations, Part 61, Subparts A and M, National Emission Standard for Asbestos (40 CFR Part 61).
  3. Written permission from the building Owner confirming the authorization for the commencement of abatement according to IDPH regulations shall be attached to the notification. (Not required for work in public and commercial buildings.)
  4. Written verification that notification of all buildings occupants and users has been made pursuant to section 855 prior to commencement of the project. (Not required for work in public and commercial buildings.)
- C. Ten days prior to commencement of work, the Contractor shall submit the following items to the Asbestos Project Manager:
1. Documentation that arrangements for the transport and disposal of asbestos-containing or contaminated materials and supplies have been made. The name and location of the disposal site, a copy of handling procedures, and a list of protective equipment utilized for asbestos disposal at the landfill, prepared and signed by the landfill owner, shall be obtained and submitted.
  2. Documentation that each asbestos worker has an asbestos worker license.
  3. Documentation that the Supervisor is accredited by the Illinois Department of Public Health.
  4. Documentation from a physician that all employees or agents who may be exposed to airborne asbestos in excess of background levels have been provided with an opportunity to be medically monitored to determine if physically capable of working while wearing the required respiratory equipment without suffering adverse health effects. In addition, documentation that personnel have received medical monitoring as required in OSHA 29 CFR 1926.1101 shall be submitted. The Contractor shall provide information to the examining physician about conditions in the work place environment (e.g. high temperatures, humidity, chemical contaminants).
  5. Drawings for layout and construction of decontamination enclosure systems and barriers for isolation of the work area.
  6. A list of NIOSH approvals for all respiratory protective devices utilized on site. In addition, manufacturer certification of HEPA filtration capabilities for all cartridges and filters shall be submitted.
  7. Documentation that all of the Contractor's employees and agents who must enter the work area have passed respirator fit tests and have been assigned respirators which fit. This fit testing shall be in accordance with qualitative procedures as detailed in the OSHA Standard 29 CFR 1926.1101 Appendix C Qualitative Fit Test Protocol. 1926.1101.
  8. Manufacturer's certification that HEPA vacuums, negative air pressure equipment, and other local exhaust ventilation equipment conform to ANSI Z 9.2-79.
  9. When rental equipment is to be used in removal area or to transport waste materials, a copy of the written notification to inform the rental company of the nature of use of the rented equipment.
  10. Results of materials testing as conducted before the abatement for purposes of utilization

during abatement activities (e.g., testing of encapsulant for depth of penetration, testing of substitute materials for adherence to encapsulated surfaces).

- D. During abatement activities the Contractor shall submit the following items to the Asbestos Project Manager:
1. Submit Daily, job progress reports detailing abatement activities, including a review of progress with respect to previously established milestones and schedules, major problems and actions taken, injury reports, property damage and equipment breakdowns.
  2. Submit upon occurrence, copies of all transport manifests, trip tickets and disposal receipts for all asbestos waste materials removed from the work area during the abatement process.
  3. Submit daily, copies of work site entry log books with information on worker and visitor access.
  4. Submit daily, logs documenting filter changes on respirators, HEPA vacuums, negative pressure ventilation units, and other engineering controls.
  5. Submit daily, OSHA compliance air monitoring results.
- E. Prior to commencement of work the Asbestos Project Manager shall:
1. Notify occupants of work areas that may be disrupted by the abatement of project dates and requirements for relocation. Arrangements must be made prior to start for relocating of desks, files, equipment and personal possessions to avoid unauthorized access into the work area.
  2. Submit to the Contractor results of background level air sampling including sampling location, name of the Air Sampling Professional, equipment utilized and method of analysis.
  3. Document that the Owner's employees who are required to enter the work area during abatement have received training equal to or exceeding the Illinois Department of Public Health requirements.
  4. Provide to the Contractor information concerning access, shutdown, and protection requirements of equipment and systems in the work area.

#### **1.06. PROTECTION**

- A. Provide protection for personnel and building as described herein and as required by regulatory agencies.
1. Abatement Contractor shall provide full containment with continuous negative air pressure.
  2. Asbestos fiber levels in areas adjacent to the work area shall not exceed 0.01 fibers per cubic centimeter of air (f/cc) or background levels, whichever is higher, as determined by phase contract microscopy. Work shall immediately cease in any work area causing or contributing to such condition. Remedial-action shall be taken to reduce such levels to acceptable limits.
  3. The contractor shall be responsible for clean up of any adjacent areas which become contaminated as a result of the asbestos removal activities.
- B. Personnel Protection:

1. All respiratory protection shall be provided to workers in conjunction with a written respiratory protection program which shall meet the requirements of OSHA regulation, 29 CFR 1926.1101(h). This program shall be posted at the work site.
  - a. Workers shall be provided with personally issued and marked respiratory equipment approved by the National Institute for Occupational Safety and Health (NIOSH).
  - b. Abatement Contractor shall be fully and solely responsible for insuring that respiratory protection shall be worn by all persons potentially exposed to asbestos from the initiation of the asbestos abatement project until all areas have been given final clearance.
2. Schedule of minimum acceptable respiratory protection.
  - a. In addition to NIOSH, OSHA and IDPH regulations.
  - b. Should any condition, be encountered where the exposure level, after application of the appropriate protection factor of the respiratory equipment in use, exceeds 0.01 f/cc, respiratory equipment with protection factors which reduce worker exposure levels below 0.01 f/cc shall be used.
  - c. Pre-cleaning/Wet Wiping of Area: MSHA/NIOSH half-face dual cartridge respirators equipped with HEPA cartridges.
  - d. Containment Construction: MSHA/NIOSH half-face dual cartridge respirators equipped with HEPA cartridges.
  - e. Asbestos Removal and Clean-Up: MSHA/NIOSH Type "C", grade "D" air supplied respirators, unless changed by a variance granted by the IDPH.
  - f. Asbestos Removal Glove Bag: MSHA/NIOSH half-face dual cartridge respirators equipped with HEPA cartridges.
  - g. Non-friable floor tile and mastic removal: MSHA/NIOSH half-faced dual cartridge respirators equipped with HEPA cartridges.
  - h. Containment Removal: MSHA/NIOSH half-face dual cartridge respirators equipped with HEPA cartridges.
  - i. Loading Waste Material on Truck (outside work area): MSHA/NIOSH half-face dual cartridge respirators equipped with HEPA cartridges.
  - j. Unloading Bags at Landfill: MSHA/NIOSH half-face dual cartridge respirators equipped with HEPA cartridges.
  - k. Provide authorized visitors with suitable respirators with fresh cartridges or a Type "C" respirator, depending on phase of operation, whenever they are required to enter the work area.
3. Protective Clothing and Equipment.
  - a. Provide workers with sufficient sets of disposable protective full-body clothing. Such clothing shall consist of full-body coveralls, footwear, and head gear as manufactured by Kimberly Clark "Kleenguard", one-piece coveralls or equal. Provide eye protection and hard hats as required by applicable safety regulations. Disposable clothing shall be disposed of as contaminated waste.

- b. Provide authorized visitors with suitable protective clothing, headgear, footwear, and gloves as described above whenever they are required to enter the work area.
- c. The contractor shall post all required notification at the work site including but not limited to:
  - I. "Caution - Asbestos Hazard" signs in accordance with OSHA Regulation 29 CFR 1926.1101 shall be posted at all internal doorways which provide access to the area in which the work will take place. The purpose of these signs is to inform persons entering an area where asbestos contamination may be present.
  - II. Department of Labor - OSHA poster Number 3038 shall be hung in place clearly visible to workmen each day prior to entering contaminated areas. This poster details the detrimental effects of airborne asbestos fibers on human health and emphasizes the importance of respirators and protective clothing.
  - III. A copy of the U.S. Environmental Protection Agency Regulations for Asbestos, -40 CFR Part 61, Subparts A and M and a copy of U.S. Department of Labor - OSHA Asbestos Regulations, 29 CFR 1926.1101, shall be posted in the clean room.
  - IV. A project directory of telephone numbers for local hospital and/or emergency squad, local fire department, a representative of the Owner, who may be reach 24 hours a day, the contractor's headquarters and other professional consultants directly involved in the project, shall be posted in the clean room.

**1.07. DELIVERY STORAGE AND HANDLING**

A. Protection:

- 1. Deliver all materials in the original packages, containers, or bundles bearing the name of the manufacturer and the brand name.
- 2. Store all materials subject to damage off the ground, away from wet or damp surfaces, and under cover sufficient to prevent damage or contamination.
- 3. Damaged or deteriorating materials shall not be used and shall be removed from the premises. Material that becomes contaminated with asbestos shall be disposed of in accordance with applicable regulations.

**2. PRODUCTS**

**2.01. MATERIALS**

- A. In accordance with Section 855.390 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois.
- B. Plastic Sheeting:
  - 1. Polyethylene
  - 2. Mil. thickness.

3. Clear and opaque as indicated.

4. Flame retardant.

C. Tape:

1. Capable of sealing joints of adjacent sheets of polyethylene and for attachment of polyethylene sheets to finished or unfinished surfaces of dissimilar materials and capable of adhering under both dry and wet conditions, including use of amended water.

D. Adhesives:

1. Capable of sealing joints of adjacent sheets of polyethylene and for attachment of polyethylene sheet to finished or unfinished surfaces of dissimilar materials and capable of adhering under both dry and wet conditions, including use of amended water.

E. Surfactant:

1. Polyoxyethylene ether and 50% of polyoxyethylene ester, or equivalent, and shall be mixed with water to provide a concentration of one ounce of surfactant to 5 gallons of water.

F. Encapsulant:

1. Capable of eliminating fiber dispersal by adhering to the fibrous substrate with sufficient penetration to prevent separation of the sealant from the asbestos containing material.

G. Impermeable Containers:

1. Air tight.

2. Water tight.

3. Capable of receiving and retaining any asbestos containing or contaminated materials for storage and transport to a disposal site.

4. Labeled in accordance with:

a. OSHA Regulation 29 CFR 1926.1101.

b. Department of Transportation Rule 49 CFR Parts 171 and 172, Hazardous Substances.

c. Environmental Protection Agency 40 CFR Part 61, (NESHAPS).

5. Plastic bags shall be 6-mil in thickness and shall be in accordance with State and Federal Regulations.

6. Labels shall carry the following warnings:

a. OSHA: DANGER  
CONTAINS ASBESTOS FIBERS  
AVOID CREATING DUST  
CANCER AND LUNG DISEASE HAZARD

b. DOT: RQ HAZARDOUS SUBSTANCE  
SOLID, NOS,

ORM-E, NA 9188  
(ASBESTOS)

- c. NESHAPS: Name of waste generator and the location at which the waste was generated.
7. Disposal Drums:
- a. Metal or fiberboard with locking ring tops.
- H. Incidental Materials:
- 1. Plywood: New, 5/8" thickness.
  - 2. Wood Furring: New, 1" x 3" nominal thickness.
  - 3. Fasteners: As required to securely join components to each other and substrates.
- I. Latex Leveling Compound: SikaTop 122 as manufactured by Sika Corporation, Lyndhurst, New Jersey or approved equal.
- J. Floor tile mastic remover
- 1. Low odor, non-toxic, non-hazardous, high flash point similar to:
    - a. Amerisafe SAFE 200+ No Odor Mastic Remover
    - b. Sentinel 747 Low Odor Mastic Remover
    - c. Graying Control Low Odor Mastic Remover

**2.02. EQUIPMENT**

- A. In accordance with Section 855.390 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois.
- B. Water Sprayer: Airless or pressure type.
- C. Negative Air Pressure Equipment.
  - 1. Contractor shall monitor pressure differentials across decontamination unit with a differential pressure meter equipped with a strip chart recorder. Meter shall be equipped with a warning buzzer which will sound if pressure differential drops below 0.01" of water.
  - 2. Negative Air Machines
    - a. General: Contractor shall supply the required number of asbestos air filtration units to the site in accordance with these specifications. Each unit shall include the following:
      - 1) Cabinet: Constructed of steel or other durable materials able to withstand damage from rough handling and transportation. The width of the cabinet should be less than 30 inches to fit through standard-size doorways. Cabinet shall be factory sealed to prevent asbestos-containing dust from being released during use, transport, or maintenance. Access to and replacement of all air filters shall be from intake end. Unit shall be mounted on casters or wheels.

- 2) Fans: Contractor shall rate capacity of fan according to usable air moving capacity under actual operating conditions. Contractor shall use centrifugal type fan.
- 3) HEPA Filters: The final filter shall be the HEPA type. The filter media (folded into closely pleated panels) must be completely sealed on all edges with a structurally rigid frame.
  - a) A continuous rubber gasket shall be located between the filter and the filter housing to form a tight seal.
  - b) Each filter shall be individually tested and certified by the manufacturer to have an efficiency of not less than 99.97 percent when challenged with 0.3 um dioctylphthalate (DOP) particles. Testing shall be in accordance with Military Standard Number 282 and Army Instruction Manual 136-300-175A. Each filter shall bear a UL586 label to indicate ability to perform under specified conditions.
  - c) Each filter shall be marked with the name of the manufacturer, serial number, air flow rating, efficiency and resistance, and the direction of test air flow.
- 4) Pre-filters, which protect the final filter by removing the larger particles, are required to prolong the operating life of the HEPA filter. Two stages of pre-filtration are required. The first stage pre-filter shall be a low efficiency type (e.g., for particles 10 um and larger). The second stage (or intermediate) filter shall have a medium efficiency (e.g., effective for particles down to 5 um). Pre-filters and intermediate filters shall be installed either on or in the intake grid of the unit and held in place with special housing or clamps.
- 5) Instrumentation: Each unit shall be equipped with a Magnehelic gauge or manometer to measure the pressure drop across filters and indicate when filters have become loaded and need to be changed. A table indicating the usable air-handling capacity for various static pressure reading on the Magnehelic gauge shall be affixed near the gauge for reference, or the Magnehelic reading indicating at what point the filters should be changed, noting Cubic Feet per Minute (CFM) air delivery at that point. Provide units equipped with an elapsed time meter show the total accumulated hours of operation.
  - a.6. Safety and Warning Devices: The unit shall have an electrical (or mechanical) lockout to prevent fan from operating without a HEPA filter. Units shall be equipped with automatic shutdown system to stop fan in the event of a major rupture in the HEPA filter or blocked air discharge. Warning lights are required to indicate normal operation, too high a pressure drop across the filter (i.e., filter overloading), and too low of a pressure drop (i.e., major rupture in HEPA filter or obstructed discharge).
- 6) Electrical components shall be approved by the National Electrical Manufacturers Association (NEMA) and Underwriter's Laboratories (UL). Each unit shall be equipped with overload protection sized for the equipment. The motor, fan, fan housing, and cabinet shall be grounded.

D. Vacuums: HEPA filtration, UL listed, NEMA approved.

### **3. EXECUTION**

#### **3.01. CONDITION OF SURFACES**

A. Examine all surfaces including those concealed above the suspended ceiling.



- B. Verify condition of existing wall and floor finishes.

### **3.02. WORKPLACE ENTRY AND EXIT PROCEDURES**

- A. In accordance with Section 855.370 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois.
- B. All the following procedures shall be posted in the clean room and equipment room.
- C. These procedures shall be followed throughout the abatement project until clearance air monitoring has been performed and documented to the satisfaction of the Asbestos Project Manager.
  - 1. All workers and authorized personnel shall enter the work area through the worker decontamination enclosure system
  - 2. All personnel who enter the work area shall sign the entry log, located in the clean room, upon entry and exit.
  - 3. All personnel, before entering the work area, shall read and be familiar with all posted regulations, personal protection requirements (including work place entry and exit procedures) and emergency procedures. A sign-off sheet shall be used to acknowledge that these have been reviewed and understood by all personnel prior to entry.
  - 4. All personnel shall proceed first to the clean room, remove all clothing and put on respiratory protection, disposable coveralls, head covering and foot covering. Hard hats, eye protection, and gloves shall also be utilized if required. Clean respirators and protective clothing shall be provided and utilized by each person for each separate entry into the work area.
    - a) During projects that involve only the use of non-friable methods to remove floor tile and mastic, workers may wear street cloths under disposable coveralls at the contractor's discretion.
  - 5. Personnel wearing designated personal protective equipment shall proceed from the clean room through the shower room and equipment room to the main work area.
  - 6. Before leaving the work area, all personnel shall remove gross contamination from the outside of respirators and protective clothing by brushing and/or wet wiping procedures. (Small HEPA vacuums with brush attachments may be utilized for this purpose as larger machines may tear the suits.) Each person shall clean bottoms of protective footwear in a walk-off plan immediately prior to entering the equipment room.
  - 7. Personnel shall proceed to the equipment room where all protective equipment except respirators shall be removed. Disposable clothing shall be deposited into appropriately labeled containers for disposal.
  - 8. Reusable, contaminated footwear shall be stored in the equipment room when not in use in the work area and shall be disposed of as asbestos contaminated at the completion of the abatement for reuse.
  - 9. Still wearing respirators, personnel shall proceed to the shower area, clean the outside of the respirator and the exposed face area under running water prior to removal of the respirator, and then shower and shampoo to remove residual asbestos contamination. Various types of respirators will require slight modification of these procedures. An airline respirator with HEPA filtered disconnect protection may be disconnected in the equipment room and worn into the shower. A powered air-purifying respirator face piece

should be disconnected from the filter/power pack assembly which is not waterproof, upon entering the shower.

- a) During projects that involve only the use of non-friable methods to remove floor tile and mastic showers are not mandatory at the contractor's discretion.

10. After showering and drying, personnel shall proceed to the clean room and dress in clean disposable clothing if returning to the work area or street clothes at the end of the work shift.

### **3.03. EQUIPMENT AND WASTE CONTAINER REMOVAL PROCEDURES**

- A. In accordance with Section 855.460 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois and the following requirements.
- B. External surfaces of contaminated containers and equipment shall be cleaned by wet sponging and/or HEPA vacuuming before moving such items into the equipment decontamination enclosure system washroom for the final cleaning.
- C. Once in the equipment decontamination enclosure system, external surfaces of contaminated containers and equipment shall be wet cleaned a second time by wet sponging before moving such items into the holding area pending removal to uncontaminated areas.
- D. Containers and equipment shall be removed from the holding area by workers who have entered from uncontaminated areas dressed in clean disposable coveralls and respiratory protection as described in Section 1.06. Drums shall be enclosed in clean, labeled, 6-mil polyethylene bags and removed to the outside.
- E. The Contractor shall **solidify** solvent residues and residues from strippers and place solidified wastes in drums made out of a material that cannot be dissolved or corroded by the chemicals.
- F. The exit from the equipment decontamination enclosure system shall be secured to prevent unauthorized entry. At no time is a worker from an uncontaminated area to enter the enclosure when a removal worker is inside.

### **3.04. BUILDING PROTECTION**

- A. In accordance with Section 855.380 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois.

### **3.05. WORK AREA PREPARATION**

- A. In accordance with Section 855.400 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois.
- B. Before disturbing, handling or disposing of any contaminated product, fixture or material, or if air monitoring tests indicate a fiber count in excess of .01 fibers per cubic centimeter in or around the work area, or if the proposed work area is known to be or suspected of being contaminated at the time work commences, a personnel decontamination unit shall be in place and utilized, and all workers and other personnel in or around the work area shall wear protective clothing and respirators as previously specified while performing the work of this section of the specifications.
- C. Post caution signs meeting the specifications of OSHA 29 CFR 1926.1101 at any location and approaches to a location where airborne concentrations of asbestos may exceed ambient background levels. Signs shall be posted at a distance sufficiently far enough away

from the work area to permit a person 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 enclosure barriers.

1. The signs shall be 20" x 14" vertical format manufactured signs with lettering sizes as specified in OSHA regulations. The spacing between lines shall be at least equal to the height of the upper of any two lines.
2. The warning signs shall bear the following information:

DANGER  
ASBESTOS  
CANCER AND LUNG DISEASE HAZARD  
AUTHORIZED PERSONNEL ONLY  
RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA

- D. Erect critical barriers over all air vents and entrances into non-abatement areas.
- E. Entrance and egress into the work area will be through a decontamination unit.
- F. Protection of floor and wall surfaces for non-friable floor tile and mastic removal shall be limited to covering walls and equipment adjacent to mastic removal locations a minimum of four feet up walls and equipment.
- G. Protection of floor and wall surfaces for non-IDPH projects shall be limited to that required by EPA and OSHA regulations.

### **3.06. PERSONNEL DECONTAMINATION ENCLOSURE SYSTEM**

- A. In accordance with Section 855.410 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois.
- B. Provide approved self-contained trailer unit if specified elsewhere.
- C. Personnel decontamination units are not required for non-friable floor tile and mastic projects.

### **3.07. EQUIPMENT DECONTAMINATION ENCLOSURE SYSTEM**

- A. In accordance with Section 855.425 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois.
- B. Equipment decontamination units (EDU) shall be utilized for non-friable floor tile removal for areas greater than 100 square feet. EDUs shall be constructed at the entrance to each area where non-friable work is to occur. If a series of rooms/areas in a contiguous area are involved, a separate EDU shall be constructed at the entrance to each room/area and at the entrance to the contiguous area. Equipment decontamination units are not required for non-friable floor tile and mastic projects under one hundred square feet. Contractor shall install a curtained doorway at entrance to work area.
- C. Equipment decontamination units are not required for non-friable floor tile and mastic projects under one hundred square feet. Contractor to install a curtained doorway at entrance to work area.

### **3.08. CONSTRUCTION AND MAINTENANCE OF DECONTAMINATION ENCLOSURE SYSTEMS AND WORKPLACE BARRIERS**

- A. In accordance with Sections 855.430 and 855.440 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois

- B. For non-friable floor tile projects construct and maintain separation barriers as described in Section 844.430 and 855.440 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois to separate and isolate the work area from the remained of the building and as indicated on the project drawings.

### **3.09. CONTAINED GROSS REMOVAL**

#### **A. CONTAINED GROSS REMOVAL**

- 1. In accordance with Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois:
  - a) Section 855.450: Commencement of Work
  - b) Section 855.460: Removal Procedures
  - c) Section 855.500: Encapsulation

#### **B. NON-FRIABLE REMOVAL OF FLOOR TILE AND MASTIC**

- 1. In accordance with Illinois Rules and Regulations for Asbestos Abatement in Public and Private Schools and Commercial and Public Buildings in Illinois:
  - a) Section 844.40 Commencement of Work
  - b) Removal Procedures
    - 1) Floor tile and mastic shall be removed using non-friable methods using infra-red heaters or other devices or methods that allow the tile to be removed without breakage.
    - 2) If tile cannot be removed without breaking, all work shall stop and gross removal methods shall be utilized.
  - c) Floor tile mastic shall be removed using non-toxic, low odor solvents or removers, solvents shall not be allowed to become dry during use.
  - d) Installation of critical barriers and the use of negative air machines in all non-friable work areas is required.
  - e) Aggressive Transmission Electron Microscopy samples will be collected in all non-friable removal areas. Contractor required to reclean the work areas until each sample is less than 70 structures per millimeter squared.
  - f) When chemical mastic removers are used, all floors shall be cleaned with products or cleaners specified by the manufacture of the mastic removal solvent.

#### **C. GLOVEBAG REMOVAL OF THERMAL SYSTEM INSULATION**

- 1. In accordance with Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois:
  - a) Section 855.450: Commencement of Work
  - b) Section 855.480: Glovebag Procedures
  - c) Section 855.500: Encapsulation

### **3.10. CLEANUP PROCEDURES**

- A. In accordance with Section 855.465 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois.
- B. Following the removal workers shall perform clean-up in accordance with all IDPH rules and regulations and with the following procedures:
  - 1. First Clean: Wet wipe all visible residue from walls and floor. If chemical mastic removers were used, all floors shall be cleaned with detergent, grease removal product or cleaner specified by the manufacture of the mastic removal solvent. Poly on walls may be removed and discarded as contaminated waste. After 12-hour settling time, workers may begin second clean.
  - 2. Second Clean: Wet wipe all surfaces and HEPA Vacuum all objects in work area. Remove all equipment from work area. After a 12-hour settling time, workers may begin third clean. If chemical mastic removers were used, all floors shall be cleaned with detergent, grease removal product or cleaner specified by the manufacture of the mastic removal solvent.
  - 3. Third Clean: Wet wipe all surfaces and HEPA Vacuum all objects in work area. Remove all equipment from work area. After a 12-hour settling time, workers may schedule final visual inspection. If chemical mastic removers were used, all floors shall be cleaned with detergent, grease removal product or cleaner specified by the manufacture of the mastic removal solvent.
- C. Following non-friable removal of floor tile and mastic, all floors shall be cleaned three times as described in paragraph 3.10 (B)(1), first clean, in addition to the other work specified in Paragraph 3.10 (B)(1).
- D. Following non-IDPH projects, clean-up shall include the cleaning specified in paragraph 3.10 (B)(1), first clean, of the specifications, plus an additional cleaning of the floors using detergent, grease removal product, or cleaner specified by the manufacture of the mastic removal solvent
- E. The work shall require clearance air sample analysis taken by transmission electron microscopy (TEM). Upon satisfaction of the Project Manager air sampling will begin. Air Sampling Professional will follow the Illinois Department of Public Health air sampling protocol.

**3.11. CLEARANCE AIR MONITORING**

- A. In accordance with Section 855.470 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois.
- B. Clearance air monitoring shall be conducted and analyzed according to the Transmission Electron Microscopy methods.
- C. The Contractor remains fully responsible for the health and safety of all persons coming into contact with the affected areas and testing required to assure same.
- D. The Contractor shall provide all OSHA required personal samples.
- E. Contractor shall be responsible for securing air clearance test result from air sampling professional.
  - 1. Results of sample analyses shall be available:
    - a. Within 24 hours for samples collected during removal.

- b. Within 48 hours for the post-removal clean check samples. If the Contractor desires faster turn around time for sample results, the additional cost shall be borne by the Contractor.
- c. If air sampling does not indicate satisfactory completion, cleaning shall be repeated, supplemented by the appropriate additional cleaning procedures as necessary until satisfactory completion is achieved. The cost for these additional cleanings, as well as all costs for the air sampling professional, asbestos project manager and air sampling analysis, related to additional cleaning and clearance testing, shall be borne by the Contractor.

### 3.12. DISPOSAL PROCEDURES

- A. In accordance with Section 855.475 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois.
- B. The Asbestos Project Manager reserves the right to accompany the transporter to the landfill.
- C. As the work progresses, to prevent exceeding available storage capacity on site, sealed and labeled containers of asbestos-containing waste shall be moved and transported to the prearranged disposal location.
- D. If the Contractor uses chemical solvents, chemical remover, or any combination of chemical products, the Contractor shall provide the owner with written documentation that the wastes generated from the use of said chemical products were disposed of in compliance with all local, county, state and federal regulations.

If the waste generated through the use of chemical solvents, chemical remover or any combination of chemical products is disposed of as a non-hazardous waste (as defined in 40 CFC 261) the Contractor shall provide the Owner with substantial proof that the wastes were in fact non-hazardous.

- E. The Contractor shall **solidify** solvent residues and residues from strippers and place solidified wastes in drums made out of material that cannot be dissolved or corroded by the chemicals.
- F. Disposal shall occur at an authorized site in accordance with regulatory requirements of NESHAP and applicable state and local guidelines and regulations.
- G. All dump receipts, trip tickets, transportation manifests and/or other documents of disposal shall be delivered to the Owner for his records. A record keeping format utilizing a chain-of-custody form shall include the names and addresses of the Owner, Contractor, pickup site, disposal site, the estimated quantity of the asbestos waste and the type and number of containers used. The form shall be signed by the Owner, the Contractor, and the Disposal Site Operator, as the material changes custody. If a separate hauler is employed, his name, address, telephone number and signature shall also appear on the form.
- H. The Contractor shall transport asbestos materials in accordance with the following procedures:
  - 1. Drums, bags and wrapped components that have been removed from the work area shall be loaded into an enclosed truck for transportation.
  - 2. The enclosed cargo area of the truck shall be free of debris and lined with 6-mil polyethylene sheeting to prevent contamination from leaking or spilled containers. Floor sheeting shall be installed first and extend up the side walls. Wall sheeting shall overlap by six (6) inches and be taped into place.

3. Drums shall be placed on level surfaces in the cargo area and packed tightly together to prevent shifting and tipping. Large structural components shall be secured to prevent shifting and bags placed on top. Containers shall not be thrown into the truck cargo area.
  4. Personnel loading asbestos-containing waste shall be protected by disposable clothing including head, body and foot protection and at a minimum, half-facepiece, air-purifying, dual cartridge respirators equipped with high efficiency filters.
  5. Any debris or residue observed on containers or surfaces outside of the work area resulting from clean-up or disposal activities shall be immediately cleaned-up using HEPA filtered vacuum equipment and/or wet methods.
  6. Large metal dumpsters used for asbestos waste disposal shall have doors or tops that can be closed and locked to prevent vandalism, wind dispersion of asbestos fibers, or other disturbance of bagged asbestos debris. Unbagged material and non-asbestos waste shall not be placed in these containers. Bags shall be placed, not thrown, into these containers to avoid splitting.
  7. Asbestos-containing materials shall be transported directly to the landfill. Temporary storage at a location other than the abatement project shall not be permitted.
- I. The Contractor shall dispose of asbestos materials in accordance with the following procedures:
1. Upon reaching the landfill, trucks shall approach the dump location as closely as possible for unloading of the asbestos-containing waste.
  2. Bags, drums and components shall be inspected when off-loaded at the disposal site. Material in damaged containers shall be repacked in empty drums or bags.
  3. Waste containers shall be placed on the ground at the disposal site, not pushed or thrown out of the trucks (weight of wet material could rupture the containers).
  4. Personnel off-loading containers at the disposal site shall wear protective equipment consisting of disposal head, body, and foot protection and, at a minimum, half-facepiece, air-purifying, dual cartridge respirators equipped with high efficiency filters.
  5. Following the removal of all containerized waste, the truck cargo area shall be decontaminated using HEPA vacuums and/or wet method. Polyethylene sheeting shall be removed and discarded in bags or drums along with contaminated cleaning materials and protective clothing once daily.

### **3.13. REESTABLISHMENT OF WORK AREA**

- A. In accordance with Section 855.520 of the Illinois Rules for Asbestos Abatement for Public and Private Schools and Commercial and Public Buildings in Illinois.
- B. The Contractor shall repair all areas of damage that occurred as a result of abatement activities.
- C. Upon completion of the work, the Contractor provide:
  1. Written certification that all work was done in complete conformance with all applicable IDPH, OSHA, EPA and all other applicable regulations.
  2. Written certification that all asbestos containing material has been removed from the site and legally disposed of in an approved waste disposal site.

3. Written certification that areas have had all specified asbestos removed from the work area.

END 02080



**1.01 SECTION INCLUDES**

- A. These environmental requirements apply to all Commercial Properties and Exterior School Projects including window removal. These specifications apply for all demolition, construction and renovation projects that require the removal and disposal of asbestos containing materials from the outside of buildings in accordance with all applicable regulations.

**1.02 PROJECT CONDITIONS**

- A. Exterior building spaces are not covered by Illinois Department of Public Health (IDPH) rules, except for covered hallways or porticos connecting buildings and outdoor mechanical systems which condition indoor air (such as air handling units, air conditioners, cooling towers, etc.), or when interior building spaces are involved.
- B. Roofing, window replacement, exterior transite sheeting, galbestos siding, asbestos-containing paint, caulking, glazing, flashings, cements, or other products installed on the building exterior are subject to Occupational Safety and Health Administration (OSHA) and National Emission Standards for Hazardous Air Pollutants (NESHAP) rules which, in many cases are less rigorous than IDPH requirements. All exterior asbestos abatement activities shall be conducted from the exterior of the building. At no time shall any work activity be staged from the interior of the building. Abatement of roofing materials requires supervision by a competent person that can be employed by the roofing contractor (refer to definition of competent person below). Abatement of these items is specified in the specifications. Related paragraphs in the Interior Abatement Section may be referenced or included where relevant.

**1.03 DEFINITIONS**

- A. In addition to the terms listed below, all definitions in the laws and regulations specified elsewhere in the specifications are incorporated by reference, whether or not restated herein.
- B. Abatement Contractor (AC): the entity responsible for performing the work in the specifications and has the training and accreditation to competently perform the work. This entity shall obtain and maintain licenses required for the work in the specifications.
- C. Architect of Record (AOR): any person or firm employed by the Owner for the purpose of designing the project.
- D. Asbestos Abatement Supervisor (Supervisor): any person who supervises asbestos abatement workers. This person must be trained, accredited, and meet OSHA competent person criteria for asbestos abatement.
- E. 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.
- F. Contractor: the entity responsible for performing the complete scope of work in the bid documents. The Contractor may elect to self-perform or subcontract out any portion of the work.

- G. Environmental Consultant (EC) means the entity with overall responsibility for the environmental aspects of the project, including design, organization, direction, and control as well as investigations, assessments and on-site supervision of project managers.
- H. Environmental Project Manager (EPM): the project manager selected by the EC to perform environmental monitoring and act on behalf of the EC for the Owner on the project
- I. 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.
- J. HEPA Filter: a High Efficiency Particulate Air filter capable of trapping 99.97% percent of particles greater than 0.3 micrometers in mass median aerodynamic equivalent diameter.
- K. IDPH: the Illinois Department of Public Health.
- L. OSHA: the federal Occupational Health and Safety Administration.
- M. Plasticize: to apply plastic sheeting over surfaces or objects to protect them from contamination or water damage.
- N. Personal Protection Equipment (PPE): the protective suits, head and foot covers, gloves, respirators and other items used to protect persons from asbestos or other hazards.
- O. RCRA: the Resource Conservation and Recovery Act and associated regulations.
- P. 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.
- Q. TCLP: the Toxicity Characteristic Leaching Procedure as specified in EPA 530/SW-846, Test Methods for Evaluating Solid Waste: Physical/Chemical Methods 3rd edition, November 1986.
- R. 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, superintendence, 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. Work also means that which is furnished, produced, constructed, or built pursuant to the Contract Documents.
- S. Work Area: the area or areas where asbestos abatement is being conducted.
- T. Work Site: the room or rooms undergoing lead abatement activities. All closets/book rooms/coat hanger rooms/vestibules/washrooms within a room are considered part of the Work Site in which abatement work has been identified on the Drawings, whether or not they are numbered separately.

**1.04 SCOPE OF WORK**

- A. Refer to Asbestos Abatement drawings in the contract documents.
- B. The Work includes all labor, equipment, materials, and supplies necessary to perform the Scope of Work in the bid documents by the procedures described herein. The AC, by submitting a bid for the Work, represents itself as knowledgeable and expert in the performance of the Work, and includes all things necessary to provide a complete and finished job, whether specifically mentioned or not.

- C. Removal of friable and non-friable asbestos-containing materials listed in the bid documents, including isolating the Work Areas, protection of adjacent areas, cleanup, proper packaging and disposal of wastes, and all other steps necessary to complete the scope of work.
- D. Repair or replacement of damaged surfaces, fixtures, or furnishings to restore them to like new condition to the satisfaction of the Architect or EC.
- E. When the bid documents include lead and asbestos abatement items in the same spaces, typically windows, painted-over transite sheeting, and flashings, the work should be performed in the sequence and combinations that produce the most efficient results, minimize concentrated lead waste volume, and produce the least amount of total waste. That sequence will generally be:
  - 1. Cleanup and removal of lead dust, flakes, chips, peeling paint, and residues most likely to fail a TCLP test.
  - 2. Removal of asbestos materials and cleanup of visible residues.
  - 3. Removal of lead-bearing architectural components.
  - 4. Removal of non-friable asbestos items. If both asbestos and lead are on the same components, for example lead paint and asbestos-containing glazing compound, the components may be removed and disposed with both the lead and asbestos-bearing items intact.
  - 5. Final cleanup and decontamination of the work space. Final air clearance (asbestos) and wipe samples (lead) may be performed concurrently.
  - 6. When lead and asbestos final decontamination processes are combined, the more stringent cleanup procedures shall apply for both.
  - 7. Waste disposal.
    - a. Classified waste: loose paint flakes, chips, and dust; lead-specific cleaning supplies; contaminated soil; combined final decontamination supplies; disposable suits, gloves, head-covers, and foot-covers; other items that fail a TCLP test.
    - b. Special waste: friable asbestos-containing waste materials and lead-contaminated waste that has passed TCLP or other RCRA tests.
    - c. Construction and Demolition (C&D) debris: non-friable asbestos-containing waste materials (such as, but not limited to intact transite, mastics, packing, caulking); lead-bearing architectural components where the paint is in intact condition.
    - d. All asbestos-containing or lead-bearing wastes, regardless of classification, shall be disposed in an IEPA-approved landfill within the State of Illinois to accept asbestos-containing or lead-bearing waste materials.
- F. Compliance with all applicable laws, regulations, standards, and these specifications. In the case of a conflict, the contractor shall comply with the most stringent.
- G. All licenses, accreditations, permits, fees, notifications, reports, or other documents required by law, regulation, this specification, or the bid documents.
- H. Provide project closeout documentation to the Environmental Project Manager (EPM) within thirty (30) days after final clearance. This documentation shall include, but is not limited to, submittals specified elsewhere in the specifications.

## **1.05 LAWS, REGULATIONS AND STANDARDS**

A. The following laws, regulations, and standards are incorporated by reference:

1. 29 CFR 1910 - US OSHA General Industry Standards
2. 29 CFR 1926 - US OSHA Construction Standards
3. 29 CFR 1926.1101 - US OSHA Asbestos Construction Standards
4. 40 CFR Part 61 - US EPA National Emissions Standards for Hazardous Air Pollutants (NESHAP), 11/90 revision
5. 40 CFR Part 763 Subpart E - US EPA Asbestos Model Accreditation Plan (MAP):  
Appendix C

Interim Final Rule

## **1.06 ASSESSMENT, MONITORING, TESTING AND ANALYSIS**

A. The EC will perform inspection, testing and design services prior to the start of work, and during the project, if necessary. The EC will also perform testing, inspection, and monitoring services during the work and upon its completion:

1. Prior to the start of the work, the EC shall
  - a. Identify suspect materials and confirm their asbestos content through review of the school's documentation or by testing;
  - b. Design the project and address any design changes as requested. Approved changes shall be submitted to the IDPH, when necessary.
2. During the work, the EC shall:
  - a. Observe the work periodically, with sufficient frequency to ensure Contractor compliance.
  - b. Collect area air samples in and around the Work Area, as needed, to verify exposure conditions.
  - c. Stop the work if airborne asbestos concentrations at the Work Area perimeter exceed 0.01 f/cc. Contractor shall be responsible for taking corrective action to reduce exposure levels and prevent recurrence; cleaning adjacent areas that become contaminated by the asbestos abatement activities.
  - d. Make copies of contractor licenses from the originals.
  - e. Complete design changes that are needed.
3. Upon completion of the work, the EC shall:
  - a. Visually inspect for visible dust and debris, and verify the full completion of the work.
  - b. Require contractor to re-clean the area or portions of areas until no visible debris remains.

- c. Perform clearance air sampling at the completion of the work activities, when necessary.
- B. The AC 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.
  - 1. A written Exposure Assessment with air sampling and analysis conducted 6 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.
  - 2. Analysis may be performed on site.
- C. Credentials required for testing and analysis of Phase Contrast Microscopy air samples:
  - 1. Air sampling shall be conducted by an IDPH licensed Air Sampling Professional.
  - 2. Accreditation by AIHA or AAR; or
  - 3. Participation in the Proficiency Analytical Testing (PAT) program.

**1.07 SUBMITTALS**

- A. The following shall be submitted to the EC no less than 10 days prior to the start of the asbestos abatement work activities.
- B. Ten (10) day NESHAP notification to the Illinois EPA when the asbestos quantities reach or exceed 260 linear feet or 160 square feet. Two (2) day IDPH notification for asbestos abatement quantities less than 260 linear feet or 160 square feet.
  - 1. Ten (10) day IEPA Asbestos Notification including inspector license number and landfill permit number.
  - 2. Evidence that all abatement related workers are trained and accredited in accordance with OSHA, NESHAP, and EPA MAP requirements:
    - a. Current Annual refresher training certificate.
    - b. Current IDPH asbestos licenses (If Applicable)
    - c. Current physician's written opinion
    - d. Current respirator fit test for negative pressure respirators when respirators are used.
  - 3. Copy of OSHA Exposure Assessment, with air sampling and analysis conducted 6 months or less prior to the start date of the abatement project.
  - 4. OSHA compliance air monitoring records generated during the project.
  - 5. Waste Shipment Records.
  - 6. Worker license and certification log.

- 7. Safety Data Sheets (SDS) for chemicals used on site.
- 8. Work Plan and Schedule.
- C. Prior to beginning work, the AC shall submit required notifications to applicable regulatory agencies and receive an Owners Authorization to proceed where asbestos abatement will take place.
- D. The AC shall provide copies of all regulatory notices to the EC, and the EPM within 24 hours of sending such notices to the regulatory authority. The AC shall not begin a project until such notices are provided to all parties listed above.

**PART 2 - PRODUCTS**

**2.01 TOOLS AND EQUIPMENT**

- A. All equipment shall at least conform to minimum industry standards:
- B. Equipment:
  - 1. Respirators shall be NIOSH approved for use with lead, asbestos, or other contaminants anticipated in the work.
  - 2. Contractor is fully responsible for complying with OSHA rules for other Safety equipment, such as hard hats, safety harnesses, eye protection, gloves, footwear, and any other safety devices used on the site.
- C. Tools:
  - 1. Ladders, scaffolding and all other rigging devices shall be constructed in a safe manor meeting all regulatory and permitting requirements.
  - 2. Power tools such as, but not limited to saws, pneumatic chisels, brushes, sanders, and needle guns shall be equipped with shrouds and HEPA-filtered local exhaust systems to capture released particles. Power tools shall also be grounded using a Ground Fault Circuit Interrupter (GFCI) breaker or outlet.

**2.02 MATERIALS**

- A. Installed materials which become a part of the work such as, but not limited to, encapsulants foam sealants and permanent enclosures shall be of good quality, non-lead-bearing, free of asbestos, and conform to the respective reinstallation specification sections.
  - 1. Contractor shall ensure that encapsulants and sealants used as primers, basecoats, fillers or covering existing materials are compatible with the respective existing or reinstallation materials and their manufacturers' warranties.
- B. Abatement materials
  - 1. Poly sheeting for all applications shall be 6 mil nominal thickness.
  - 2. Tape shall be 2 inch or 3 inch duct tape or other waterproof tape suitable for joining poly seams and attaching poly sheeting to surfaces.

3. Spray adhesives shall be non-flammable and free of methylene chloride solvents.
4. Disposal bags shall be 6 mil.
5. Disposable suits, hoods, and foot coverings shall be TYVEK or similar.
6. Solvents shall be compatible with any primers, mastics, adhesives, paints, coatings, or other surfacing materials to be installed following their use.

### **PART 3 - EXECUTION**

#### **3.01 EMPLOYEE TRAINING, QUALIFICATION AND MEDICAL SCREENING**

- A. Supervisors and Workers shall be trained, accredited, and licensed in accordance with IDPH rules and regulations:
  1. Contractor shall keep copies of current licenses, initial training course certificate, and most recent annual refresher training certificate at the jobsite at all times for all contractor personnel.
  2. A Supervisor (competent person) shall be present at the work site at all times when work under the specifications is being conducted.
- B. Medical Screening. All contractor personnel shall have a current medical examination in accordance with OSHA requirements. Copies of the Physician's Written Opinions shall be kept on site along with a current fit test certificate.

#### **3.02 PERMISSIBLE EXPOSURE LIMITS**

- A. The OSHA permissible exposure limit (PEL) for worker exposure to airborne fibers is 0.1 f/cc as an 8-hour time-weighted average (TWA).
- B. The OSHA short term excursion limit (STEL) for worker exposure to airborne fibers is 1.0 f/cc for a 30 minute sample.

#### **3.03 EXPOSURE ASSESSMENT AND MONITORING**

- A. The AC shall make an assessment of the airborne exposures. Assessment shall conform to OSHA requirements and may be based upon:
  1. Initial monitoring of representative workers who the contractor believes are exposed to the greatest airborne concentrations of asbestos, or
  2. Past monitoring (within the past 12 months) or objective data for conditions closely resembling the processes, type of material, control methods, work practices and environmental conditions to be used for these documents.
  3. In the absence of an exposure assessment the contractor shall perform the work in full negative pressure containment with Type C pressure-demand respirator with auxiliary SCBA escape bottle.
- B. The Contractor shall perform personal monitoring in accordance with the following requirements:
  1. Initially, to establish an exposure assessment when past monitoring or objective data are not available for an initial determination.

2. Daily, if the exposures are, or are expected to be, above the PEL of 0.1 f/cc.
3. Periodically if the exposures are, or are expected to be, below the PEL.
4. Whenever there has been a change of equipment, process, control, personnel, or a new task has been initiated that may affect employee exposures, the exposure assessment shall be updated, and monitoring shall be reinstated if exposures are unknown or are expected to exceed the PEL.
5. Area Monitoring is required at the perimeter of the Work Area to verify that exposures to adjacent areas are below the PEL.

### **3.04 RESPIRATORY PROTECTION**

- A. Respiratory protection shall be worn by all persons potentially exposed to airborne asbestos fibers from the start of the abatement project until air monitoring analysis results prove otherwise.

### **3.05 HYGIENE PRACTICES**

- A. Eating, drinking, smoking, chewing gum or tobacco, and applying of cosmetics are not allowed in the Work Area.
- B. All persons entering the Work Area shall wear appropriate PPE.
- C. When the use of a Personnel Decontamination Enclosure System is deemed necessary by the EC, the AC shall follow all entry and exit procedures posted in the Personnel Decontamination Enclosure System.
- D. Personal Protection Equipment (PPE) shall include:
  1. Full body disposable suits, headgear, and footwear.
  2. Gloves.
  3. Hard hats.
  4. Non-disposable footwear and clothing shall remain in the Work Area and shall be disposed of as contaminated waste when the job is completed.
  5. Authorized visitors shall be provided with suitable PPE when required in the Work Area.
  6. PPE is required when exposures are, or are expected to be above the PEL.
- E. A Personnel Decontamination (decon) Facility is required when worker exposures are expected to be above the PEL. The Decontamination unit may be remotely located if not feasible to locate adjacent to the Work Area.
  1. Establish a negative pressure of at least 0.02 inch water column between the dirty equipment room and adjacent spaces, including the clean room. Assume Negative Air Machines (NAM) operate at 80% design capacity.
  2. Provide at least 4 air changes per hour within the decon unit
  3. All personnel shall use a double-suiting procedure for traveling between Work Areas and decon. Persons shall HEPA-vacuum the exterior of their disposable suits at the entry to the Work Areas, put on a clean suit over the existing suit, and proceed to the decon unit for shower decontamination and change into street clothes.



- F. To exit, persons shall HEPA-vacuum down clothing at the Work Areas entry, and leave the Work Areas. When disposable suits are used, they shall be HEPA-vacuumed, stripped off, and deposited in an asbestos disposal bag. Personnel may then leave the Work Areas.

### **3.06 PROHIBITED ACTIVITIES**

- A. Dry removal or dry sweeping, except:
  - 1. During freezing weather. In this case, temperature and weather conditions must be recorded at the start, during, and at the end of the shift.
  - 2. On roofs with 3:1 slope or greater. In this case, roofing shall be removed in an intact condition, as much as possible.
  - 3. When equipment damage or other hazard exists. In this case, written permission from IEPA is required prior to performing dry removal.
- B. Use of compressed air for cleaning.
- C. Use of high speed power tools not equipped with a HEPA-filtered local exhaust system.
- D. Removing respirators or other PPE in the Work Areas.

### **3.07 WORK AREAS ISOLATION AND PREPARATION**

- A. General Preparation
  - 1. Post caution signs meeting the specifications of OSHA 29 CFR 1926.1101 (k)(6) at any location and approaches to a location where airborne concentrations of asbestos may exceed ambient background levels.
  - 2. Secure the Work Areas from entry by unauthorized persons.
- B. Exterior Preparation
  - 1. 6 mil plastic sheeting shall be placed over the ground, foundation, or other surfaces below the abatement area.
  - 2. Unauthorized entry shall be prevented by using appropriate barriers, such as warning tape, fencing, or other suitable barriers.
  - 3. Nearby air intakes, grilles, windows, and other openings into the building interior above, below, or beside the Work Areas that could be exposed to released airborne dust shall be closed or otherwise sealed off with poly and tape.
  - 4. All electric power in the Work Areas shall be protected with Ground-Fault Circuit Interrupters.

### **3.08 ABATEMENT PROCEDURES**

- A. General Removal Requirements:
  - 1. Asbestos materials shall be wetted and kept wet during removal.
  - 2. ACM shall be bagged or containerized as it is removed. Wastes shall not be dropped or thrown to the ground. Unless the material is carried or passed to the ground by hand, it shall be lowered via covered, dust-tight chute, crane, hoist, or other means that prevent the wastes from being dropped or thrown.

3. Appropriate OSHA protection shall be provided when working from exterior access:
  - a. Scaffolding shall be equipped with handrails and mid-rails designed to provide fall protection, or full-body safety harnesses shall be worn and tied off to a secure anchor point.
  - b. Workers in man-lifts shall wear full body harnesses and tie to the tie-off point provided on the man-lift basket whenever the basket is elevated from ground level.
  - c. The contractor shall ensure that scaffolding, man-lifts and the workers erecting and using the equipment meet all federal, state and local regulations and requirements including the acquisition of all required permits for the erection and use of such equipment.
  
- B. Window Replacements: Asbestos-containing materials are most likely to be found in exterior caulking and glazing putty. Windows may be removed under the specifications if ACM is handled from the building exterior. If ACM materials must be accessed from inside the building or ACM wastes must be transported through the building interior, then IDPH-regulated requirements shall apply at no additional cost to the Owner. For exterior work:
  1. Close windows and seal from the inside by covering with 6 mil poly and tape, or by applying tape directly to window joints and seams.
  2. Any ACM not required to be disturbed for window removal should be left in place (e.g. window pane glazing).
  3. ACM that must be disturbed (e.g. caulking at the edge of the window frame) must be removed completely, including three-dimensional residues.
  4. Collect debris and deposit in asbestos waste bags as the work proceeds. Do not allow wastes to accumulate on surfaces.
  5. Abate ACM and LBP on all window components to remain in place.
  
- C. Roofing:
  1. General: Remove ACM roof mastics, cements, underlayments, and flashings in an intact state to the extent feasible. Asbestos-containing shingles may occasionally break even when removed carefully. The fact that otherwise intact roofing materials become separated or broken does not by itself render them non-intact. However, if they become pulverized, reduced to powder or dust, they have become non-intact.
    - a. The Contractor shall take care to minimize the amount of roofing material damage, or;
    - b. If the materials are rendered non-intact, the Contractor shall employ methods to contain the dust and debris and utilize hygiene practices appropriate for friable (OSHA Class I) ACM, including PPE, decontamination units, and monitoring. Monitoring may include area samples at the Work Areas perimeter to determine that airborne asbestos fibers are not being released in concentrations above the PEL.
  2. Built-up roofing and asphalt shingles:
    - a. Power cutting machines shall be equipped with a HEPA-filtered dust collection system and shall be misted during use.

- b. Dust generated by the cutting operation shall be collected with HEPA vacuums or wet cleaning methods.
- 3. Rigid roofing materials, such as cement asbestos shingles: remove intact and minimize breakage.
- D. Transite, Galbestos sheeting (galvanized metal with a baked-on asbestos paint), Asbestos/Cement pipe, or other rigid panels shall be removed using wet methods.
- E. Other
  - 1. Non-LBP and other coatings, electric cable insulation or joint coverings, and other miscellaneous materials that are to be removed with the substrate or that can be removed without becoming friable may be removed as intact (OSHA Class II, EPA NESHAP Category I or II non-friable) in accordance with procedures described in General Removal Requirements and Roofing paragraphs above.
  - 2. Non-LBP, coatings, and other miscellaneous materials that must be removed from the substrate or that otherwise will become friable must be removed as non-intact (OSHA Class I, EPA NESHAP friable) in accordance with procedures described in General Removal Requirements and Roofing paragraphs above.

**3.09 CLEANING AND DECONTAMINATION**

- A. All visible accumulations of ACM, debris, tools, and unnecessary equipment shall be removed from the Work Areas.
- B. Protective poly shall be folded in on itself, rolled up, placed in asbestos disposal bags, and disposed as asbestos waste.
- C. Surfaces which have been exposed to friable ACM or its dust shall be HEPA vacuumed
- D. Dry sweeping of surfaces which have been exposed to friable ACM or its dust is not permitted.

**3.10 FINAL CLEARANCE**

- A. Cleaning may be discontinued when there is no visible debris and area air monitoring verifies that exposures are below the PEL. If any area air monitoring analysis results demonstrate results are at or above the PEL, the AC is responsible for repeating the cleaning as necessary until tests are satisfactory. All expenses associated with the collection and analyses of additional air monitoring tests are the responsibility of the AC.

**3.11 WASTE DISPOSAL AND EQUIPMENT LOAD-OUT**

- A. Roofing waste may be loaded in bulk into lined enclosed receptacles, such as dumpsters or trailers. Receptacles shall be closeable and lockable to provide security and to prevent air emissions.
- B. Packaged asbestos wastes:
  - 1. Asbestos-containing wastes, including removed ACM and debris, poly, critical barrier materials, suits, respirator filters, vacuum HEPA filters, water filters, and other asbestos-containing items shall be properly packaged for disposal.
  - 2. Use 6 mil plastic bags with gooseneck seal, or other impermeable containers.

3. Wrap large or irregular items in 6 mil poly sheeting and seal with tape.
  4. Sharp, jagged, or other items that may puncture poly shall be packaged in rigid impermeable containers such as drums or boxes, or wrapped in burlap or other protective covering before sealing in bags or poly sheeting.
  5. Label containers for friable ACM waste:
    - a. OSHA warning label.
    - b. DOT performance-oriented hazardous material label.
    - c. Name and address of generator and abatement location.
- C. Removing items from the Work Areas:
- D. Packaged asbestos wastes shall be HEPA-vacuumed before removing from the Work Areas.
- E. Storage of packaged asbestos wastes shall be in a completely enclosed dumpster, or other suitable container that can be secured. The secured area shall be kept locked at all times to prevent unauthorized access.
- F. Shipment of items from the project.
1. Decontaminated tools and equipment may be shipped by normal carrier to warehouse, another jobsite, or other destination.
  2. For asbestos wastes:
    - a. Line enclosed shipping container with 6 mil poly prior to loading packaged friable asbestos wastes.
    - b. Post NESHAP placards during loading of friable asbestos wastes.
    - c. Execute the NESHAP-required Waste Shipment Record (WSR) to be signed by the generator, transporter, and landfill. All WSRs shall be returned to the EC within 30 days of shipment.
    - d. ACM waste shall be transported from the work site directly to the landfill.
- G. Disposal of packaged asbestos wastes.
1. Only landfills approved and permitted for accepting asbestos wastes may be used for disposal.
- H. A punch list walk-through shall be conducted for each cleared Work Areas within two working days of clearance testing by the EC, Contractor, building representative, and AOR. All punch list items shall be completed within five working days of walk through.

**END OF SECTION**

## Section 028613 – Universal and Hazardous Waste Management

**PART 1 - GENERAL****3.12 SECTION INCLUDES**

- A. These environmental requirements apply to all projects. These specifications apply for all demolition, construction and renovation projects that require the removal and disposal of hazardous and/or universal waste in accordance with all applicable regulations.
- B. This Section describes the segregation, packaging, labeling, transport, and disposal and/or recycling of hazardous and universal waste materials generated by demolition/renovation activities and the subsequent shipment of properly packaged and labeled waste materials to open, permitted and Owner-approved disposal sites.
- C. The Contractor's Work includes work area preparation, sampling and analysis, on-site handling, supervision of all Work, preparation of reports, protection of on-site persons, utilities, and property, and payment of all transport and disposal/recycling fees.

**3.13 DEFINITIONS**

- A. In addition to the terms listed below, all definitions in the laws and regulations specified elsewhere in the specifications are incorporated by reference, whether or not restated herein.
- B. Board: the Owner of the property and the authority ordering the Work specified herein.
- C. Board Representative: the entity responsible for overall project coordination and completion.
- D. Capacitor: device for accumulating and holding a charge of electricity and consisting of conducting surfaces separated by dielectric fluid.
- E. CFR: the Code of Federal Regulations, is the basic component of the Federal Register publication system. The CFR is a codification of the regulations of the various Federal Agencies.
- F. Chemical Waste Landfill: an open and approved landfill, permitted under 35 IAC Subtitle G Part 814 at which protection against risk of injury to health or the environment from migration of PCBs to land, water or the atmosphere is provided from PCBs and PCB items deposited therein by locating, engineering, and operating the landfill as specified in 40 CFR 1761.75.
- G. Component: all removable parts/materials which make up ballasts, bulbs, batteries, and other electrical equipment, a percentage of which can be recycled.
- H. Container: any portable device, in which material is sorted, transported, treated, disposed of, or otherwise handled.
- I. Contractor: the entity responsible for performing the complete scope of work in the Documents. The Contractor may elect to self-perform or subcontract out any portion of the work.
- J. Disposal: to intentionally or accidentally discard, throw away or otherwise complete or terminate the useful life of PCBs and PCB items. Disposal includes spills, leaks, and other uncontrolled discharges of PCBs as well as actions related to containing, transporting, destroying, degrading, decontaminating, or confining PCBs and PCB items.
- K. Disposal Facility: a facility or part of a facility at which hazardous waste is intentionally placed into or on any land or water, and at which waste will remain after closure.

- L. EPA Identification: the unique number assigned by the EPA to each generator or transporter of hazardous waste, and each treatment, storage or disposal facility.
- M. Fluorescent light ballast: a device that electrically controls fluorescent light fixtures and that includes a capacitor containing 0.1 kg or less of dielectric.
- N. Leak or Leaking means any instance in which PCB, chemical, hazardous or universal waste Article, Container or Equipment has any PCB, chemical, hazardous or universal waste residue on any portion of its external surface or surrounding area.
- O. Facility: all contiguous land, structures, other appurtenances, and improvements on the land, used for treating, storing or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units, e.g. one or more landfills, surface impoundments, or a combination of them.
- P. On-site: within the boundaries of a contiguous property unit.
- Q. OSHA: the federal Occupational Health and Safety Administration.
- R. Landfill: an open and permitted disposal facility or part of a facility where hazardous and special wastes are placed in or on land and which is not a land treatment facility, a surface impoundment, or a combination of them.
- S. Managing Environmental Consultant (MEC): the entity with overall responsibility for the environmental aspects of the project, including design, organization, direction, oversight and control as well as investigations, assessments, and supervision of project manager.
- T. Manifest: the shipping document, EPA form 7710-53, used for identifying the quantity, composition, origin, routing, and destination of hazardous waste during its transportation from the point of generation to the point of treatment, storage or disposal.
- U. Polychlorinated Biphenyls (PCBs): any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of substances which contains such substance.
- V. PCB Article Container: any package, can, bottle, bag, barrel, drum, tank, or other device that contains PCB Articles or PCB Equipment, and whose surface(s) has not been in direct contact with PCBs.
- W. PCB Container: any package, can bottle, bag, barrel, drum, tank, or other device that contains PCBs or PCB Articles and whose surface(s) has been in direct contact with PCBs.
- X. PCB Item: any PCB Article, PCB Article Container, PCB Container, or PCB Equipment, that deliberately or unintentionally contains or has as a part of it any PCB or PCBs.
- Y. Recover Refrigerant: to remove refrigerant in any condition from an appliance without necessarily testing or processing it in any way.
- Z. Recycle Refrigerant: to extract refrigerant from an appliance and clean refrigerant for reuse without meeting all of the requirements for reclamation. In general, recycled refrigerant is refrigerant that is cleaned using oil separation and single or multiple passes through devices such as replaceable-core filter-driers, which reduce moisture, acidity, and particulate matter.
- AA. Reclaim Refrigerant: to reprocess refrigerant to at least the purity specified in Air-Conditioning and Refrigeration Institute (ARI) Standard 700-1988, "Specification for Fluorocarbon refrigerants", and to verify this purity using the analytical methodology prescribed in the standard. In general reclamation involves the use of processes or procedures available only at the processing or manufacturing facility.

- BB. Storage: the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, destroyed, disposed of or stored elsewhere.
- CC. 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.
- DD. Toxic Characteristic Leaching Procedure (TCLP): a laboratory test method to determine the mobility of both organic and inorganic compounds present in liquid, solid, and multiphase wastes performed in accordance with test methods required under 40 CFR Part 261 and 268.
- EE. Transporter: any person engaged in the off-site transportation of special waste and/or hazardous waste within the United States, by air, rail, highway or water, if such transportation requires a manifest under 40 CFR Part 262.

**3.14 SCOPE OF WORK**

- A. The work includes all labor, equipment, materials, and supplies necessary to perform the Scope of Work in the bid documents by the procedures described herein. The Contractor, by submitting a bid for the work, represents itself as knowledgeable and expert in the performance of the work, and includes all things usually and customarily necessary to provide a complete and finished job, whether specifically mentioned or not.

**3.15 QUALITY ASSURANCE**

- A. Work outlined in this Section must be performed by a qualified Contractor, with a minimum of 10 years' experience, who is thoroughly familiar with working with regulated waste materials of similar size and scope, the Contractor must be familiar with and capable of complying with all federal, state, and local regulatory requirements pertaining to waste handling.
- B. Medical Examinations: The Contractor shall provide workers with a comprehensive medical examination as required by 29 CFR 1910.134 and 29 CFR 1926.62. The examination will not be required if adequate records show that employees have been examined as required within the last year. The Contractor shall institute a medical surveillance program for all employees who are or may be exposed above the action level for more than 30 days per year.

**3.16 LAWS, REGULATIONS, AND STANDARDS**

- A. The Contractor shall assume full responsibility and liability for the compliance with all applicable federal, state, and local regulations pertaining to hazardous, special and universal waste management and disposal/recycling.
- B. Federal Requirements:
  - 1. Federal requirements which govern the management, hauling and disposal of hazardous, special and universal waste/recycled material include but are not limited to the following:
    - a. DOT: U. S. Department of Transportation, including but not limited to the following:
      - 1) Hazardous Substances, Title 49, Part 171 and 172 of the Code of Federal Regulations.
      - 2) Hazardous Material Regulations, General Awareness and Training Requirements for Handlers, Loaders and Drivers,
      - 3) Title 49, Parts 171-180 of the Code of Federal Regulations.

- 4) Hazardous Material Regulations, Editorial and Technical Revisions, Title 49, Parts 171-180 of the Code of Federal Regulations.
  - a) EPA: U. S. Environmental Protection Agency (EPA), including but not limited to the following:
    - Management of Hazardous Wastes Resource Conservation and Recovery Act (RCRA), Title 40, Parts 260-299 of the Code of Federal Regulations.
    - Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution In Commerce, and Use Prohibitions, Title 40, Parts 761, of the Code of Federal Regulations.
    - Protection of Stratospheric Ozone, Title 40, Part 82 of the Code of Federal Regulations.
    - Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Title 42, Section 103.
    - Universal Waste Rule, Title 40, Part 273 of the Code of Federal Regulations.
  - b) LABOR: Occupational Safety and Health Administration, including but not limited to:
    - Occupational Safety and Health Guidelines, Respiratory Protection, Title 29, Part 1910.134.
    - Occupational Safety and Health Guidelines, Occupational Safety and Health Standards, Lead, Title 29, Part 1910.1025.
    - Occupational Safety and Health Guidelines, Occupational Safety and Health Standards, Hazard Communication, Title 29, Part 1910.1200.
    - Safety and Health Guidelines for Construction, Title 29, Part 1926 of the Code of Federal Regulations.
- C. State Requirements: Abide by all state requirements which govern the management, hauling and disposal of hazardous, special and universal waste/recycled material. In Illinois, this includes, but is not limited to the following:
  1. Title 35 of the Illinois Administration Code (IAC), including but not limited to the following:
    - a. Wastestream Authorization, IAC Chapter I, Subpart b, Part 709.
    - b. Hazardous Waste Management Systems: General, IAC Chapter I, Subchapter c, Part 720.
    - c. Identification & Listing of Hazardous Waste, IAC Chapter I, Subchapter c, Part 721.
    - d. Standards Applicable to Generators of Hazardous Waste, IAC Chapter I, Subchapter c, Part 722.
    - e. Standards Applicable to Transporters of Hazardous Waste, IAC Chapter I, Subchapter c, Part 723.
    - f. Standards Applicable to Treaters, Storers, and Disposers of Hazardous Waste, IAC Chapter I, Subchapter c, Part 724.
    - g. Interim Status Standards of Hazardous Waste Treaters, Storers, and Disposers, IAC Chapter I, Subchapter c, Part 725.
    - h. Standards for the Management of Specific Hazardous Waste and Specific Types of Hazardous Waste Management Facilities, IAC Chapter I, Subpart c, Part 726.



- i. Land Disposal Restrictions, IAC Chapter I, Subchapter c, Part 728.
  - j. Universal Waste Management, IAC Chapter I, Subchapter d, Part 733.
  - k. Solid Waste, IAC Chapter I, Subchapter i, Part 807.
  - l. Special Waste Classifications, IAC Chapter I, Subchapter i, Part 808.
  - m. Special Waste Hauling, IAC Chapter I, Subchapter i, Part 809.
  - n. Standards for New Solid Waste Landfills, IAC Chapter I, Subchapter i, Part 811.
  - o. Procedural Requirements for Permitted Landfills, IAC Chapter I, Subchapter i, Part 813.
  - p. Standards for Existing Landfills and Units, IAC Chapter I, Subchapter g, Part 814.
  - q. Standards for Management of Used Oil, IAC Chapter I, Subchapter e, Part 739.
- D. Local Requirements: Abide by all local requirements as outlines within the Municipal Code of the City of Chicago which governs the management, hauling, and disposal of hazardous, special and universal waste/recycled material.

### 3.17 SUBMITTALS

- A. Before start of any hazardous waste removal Work, the Contractor must submit a Hazardous Waste Management Plan to the MEC fifteen (15) days prior to the start of Work.
- B. During the Work, the Contractor must submit the following to the MEC, with ten (10) days of activity, off-site removal, or completion of work if duration is less:
  - 1. TCLP test results, as required to characterize waste paint chip debris for segregation and packaging purposes prior to transport from the site.
  - 2. Submit copies of all executed manifests and disposal site receipts and waste quantities within ten (10) days to the MEC.
  - 3. Receipts for all recycled materials accepted at authorized recycling facilities. The receipts will include the number of components recycled as well as the amount of materials recycled and/or disposed.
  - 4. Documents for the removal, handling, recycling or disposal of CFC Refrigerant/Reclamation.
  - 5. Daily Reports - list names of active workers for each day, work starting and stopping times, visitors to the site, and description of Work accomplished.
- C. Submittal Review:
  - 1. Review of submittals or any comments made do not relieve the Contractor from compliance with the requirements of the contract specifications and drawings. The purpose of this check is to review for general conformance with the design concept of the project and general compliance with the information given in the Contract Documents.
  - 2. The Contractor must not begin any Work applicable to this section until all required submittals have been reviewed and accepted by the MEC.

### 3.18 HAZARDOUS WASTE PLAN REQUIREMENTS

#### A. General Applicability of Codes and Regulations:

1. Except to the extent that more explicit or more stringent requirements are written directly into the Contract Documents, all applicable codes and regulations have the same force and effect (and are made a part of the Contract Documents by reference) as if copied directly into the Contract Documents, or as if published copies are bound herewith.

#### B. Contractor Responsibility:

1. Notice shall be provided to the Board Representative a minimum of 2 working days prior to the removal of any hazardous, special or universal waste and/or recycled hazardous, special or universal waste from the site.
2. Notice will be provided to the Board Representative within 4 hours of any environmental problems, complaints, fines, citations or issues by any government body or regulatory agency pertaining to hazardous, special or universal waste management and disposal. Written confirmation will be provided to the Board Representative within 48 hours of the incident that indicates that all problems and issues have been satisfactorily addressed.

#### C. The Contractor must prepare a Hazardous Waste Plan designating appropriate procedures and equipment for performing the Work. The Hazardous Waste Plan must address the proper management/handling and disposal/recycling of wastes generated during Work activities. The Contractor's Hazardous Waste Plan for this project must include as a minimum the items listed below:

##### 1. List of Hazardous Waste Equipment:

- a. A description of the proposed equipment to be used during the removal, handling, temporary storage and transport of hazardous materials related to the Work.
- b. Hazardous Material Handling:
  - 1) Procedures including a description of the method of transportation and storage of each type of hazardous material, for movement on and off site.
  - 2) Contractor shall provide a description of procedures for on-site characterization of chemicals for consolidation prior to disposal/recycling.
  - 3) The plan will include the following documentation for each transporter:
    - a) A copy of state and local special waste and/or hazardous waste hauler licenses for each transporter must be provided in the Plan.
    - b) U.S. EPA Identification Number of waste hauler.
    - c) Current list of all transporting vehicles to be used including:  
Vehicles make, model and year.  
Serial number for each vehicle.  
Vehicle license number.  
Number of axels.  
Weight capacity of vehicle.
    - d) A list of all licensed qualified truck drivers. Drivers should be able to provide their driver's license upon request.

- e) Instances where rail haulers are being used, copies of all applicable permits and licenses for the load on/off site location(s) and/or transfer location(s) will be provided.
- 4) Contractor shall provide the following documentation for each disposal/recycling facility:
    - a) Name and address of waste disposal facility where hazardous waste materials are to be disposed including:  
Contact person and telephone number.  
Copy of state license and permit.  
Disposal facility permits.
    - b) A signed statement from an authorized representative of the recycling or disposal facility stating the percentage of recycled materials for each of the components including the estimated percentage pertaining to each component which has no recycling value.
  - 5) Safety Precautions -Personnel:
    - a) List safety equipment and clothing to be used per OSHA regulations.
    - b) A description of emergency procedures to be followed in case of physical contact, ingestion, inhalation, etc.
  - 6) Emergency Spills:
    - a) A description of methods to be used for containment.
    - b) A description of methods to be used for collection and disposal.
    - c) A description of methods and materials to be used to restore areas harmed by emergency spills.
  - 7) Lead-containing Paint Management:
    - a) A description of the work procedures that will be utilized to minimize the generation of airborne lead into the environment.
  - 8) In addition, the Plan will provide:
    - a) Specimen copy of Uniform Hazardous Waste Manifest form.
    - b) Copy of EPA "Notice of Hazardous Waste Activity" form.
    - c) Copy of forms and permits required by federal, state, and local agencies.
    - d) Sample of disposal label(s) to be used.

**PART 2 - PRODUCTS**

**2.0 TOOLS AND EQUIPMENT**

- D. Disposal Bags: Provide 6 mil (0.15 mm) thick leak-tight polyethylene bags.
- E. DOT Hazardous Waste Disposal Drums: Provide DOT 17-H Open -Top Drums (55-gallon) in accordance with DOT title 49 CFR Parts 173, 177, 178, and 179.

- F. Fiberboard Drums, cylindrical containers manufactured from sturdy fiberboard will be utilized for storage transportation of electrical equipment.
- G. PCB containing ballasts shall be place in 55-gallon drums with vermiculite packing. The drums will be sealed, and labeled as containing hazardous PCB waste. The label shall also include the name and address of the parcel. However, if ballasts are damaged they shall be stored prior to disposal in accordance with 40 CFR 761.65.
- H. DOT Hazardous Waste Labels: in accordance with DOT regulations Title 49 CFR parts 173, 177, 178, and 179.
- I. Corrugated "Gaylord" Boxes with the use of a liner will be used to store and transport bulk materials which will be kept on pallets during storage and transportation.
- J. Materials to be used to restore areas harmed by emergency spills.
- K. Safety equipment and associated clothing to be used.
- L. Hazardous material manifests and other related forms required by state and local agencies.
- M. Utilize equipment to recover refrigerant that is appropriate for the following:
  1. Type of system encountered
  2. Refrigerant type
  3. Achieving IEPA-mandated vacuum levels

### **PART 3 - EXECUTION**

#### **3.0 GENERAL REQUIREMENTS**

- N. The Contractor shall train each employee performing Work prior to the time of initial job assignment in accordance with applicable regulations.
- O. Respiratory Protection Program:
  1. The Contractor shall furnish each employee required to wear a negative pressure respirator or other appropriate type with a respirator fit test at the time of initial fitting and at least every 6 months thereafter if required by 29 CFR 1910.1025.
  2. The Contractor shall establish and implement a respiratory protection program as required by 29 CFR 1910.134 and 29 CFR 1926.62.
- P. Hazard Communication Program: Establish and implement a Hazard Communication Program as required by 29 CFR 1910.1200.
- Q. Post warning signs at entry points to hazardous Work area, as necessary.
- R. Segregate, package, label, transport and dispose of Hazardous Waste in accordance with DOT, EPA, state, and local regulations.
- S. Scheduling/Sequencing of the demolition and/or abatement is to be coordinated by the Contractor.

- T. Contractor shall decontaminate all residues from all surfaces where pre-existing leaks occur. Contractor shall decontaminate all surfaces where leaks occur during the removal and disposal process.
- U. Extreme care shall be used to prevent leakage of chemicals, liquid wastes, refrigerant, etc. during removal processes.
- V. Do not mix potentially hazardous waste streams or different refrigerants in the same recovery vessel. Where feasible, separate each type of hazardous waste from other types of hazardous wastes and construction waste.
- W. All electrical circuits shall be de-energized and locked out prior to removal of ballasts. Contractor shall provide temporary lighting as needed.
- X. The Contractor shall identify the location and Commissionship of all on-site transformers. The contents from each transformer shall be characterized for PCB content by the Contractor for proper disposal.
- Y. The Contractor shall determine location and type of each radiological waste. The Contractor shall make all arrangements from the proper decommissioning of equipment and disposal of related materials.

**3.19 HAZARDOUS WASTE DESIGNATION**

- A. Where not otherwise designated by the Owner as hazardous waste, characterize applicable suspect waste products by conducting representative TCLP testing and referencing 40 CFR Part 261.
- B. Work shall include characterization and proper disposal of any soot contained within boilers, incinerators, or stacks; maintenance fluids within heating/cooling equipment; hazardous chemicals; storage tanks; or lead content of paint present.
- C. Fluids from transformers, electrical equipment, hydraulic equipment, etc. shall be characterized for PCB content per 40 CFR Part 761.
- D. Representative sampling of waste products will be in accordance with EPA Document SW 846.
- E. TCLP test analysis will be performed in accordance with EPA Method 1311.
- F. Radiological Wastes shall be classified in accordance with the NRC operating agreement.

**3.20 HAZARDOUS WASTE**

- A. The following waste products are designated by the Owner as non-salvageable and as Hazardous Waste Types:
  - 1. Waste Type A: PCB waste.
    - a. PCB-containing ballasts from fluorescent light fixtures.
    - b. PCB-containing electrical transformers and switch gears.
    - c. PCB-containing hydraulic fluid, which can be found within but not limited to the following equipment:
      - 1) Hydraulic-lift elevators

- 2) Hydraulic trash compactors
  - 3) Hydraulic loading dock lifts
2. Waste Type B: Mercury-containing waste.
    - a. Thermostats with mercury switches. Individually bagged mercury-containing thermostats.
    - b. Fluorescent and mercury-vapor lamps/bulbs.
    - c. Thermometers.
    - d. Gauges and regulators (including those found in waste medical equipment).
    - e. Elemental mercury.
  3. Waste Type C: Medical Waste.
    - a. Used and unused sharps.
    - b. Contents of bio-hazard waste containers, including drums and bins.
    - c. Surplus medical supplies.
    - d. Contents of medical devices, such as dialysis machines, ventilators.
    - e. Human and animal pathological wastes including tissue samples stored on slides and preserved and unpreserved specimens.
  4. Waste Type D: Chemical Wastes.
    - a. Cleaning chemicals such as bleach, ammonia, carpet cleaner, etc.
    - b. Laboratory chemicals such as xylenes, benzene, acetic acid, dyes, formaldehyde, etc.
    - c. Boiler and water treatment chemicals.
    - d. Developing chemicals associated with the processing of x-rays and other photographic images, both used and virgin product.
    - e. Unused medicine.
    - f. Building maintenance chemicals such as paint, adhesives, glazing compound, caulk compound, roofing materials, concrete binder, resurfacing compounds, etc.
    - g. Equipment maintenance chemicals such as lubricants, solvents, and oils.
    - h. Fuels, such as gasoline, No. 2 Fuel Oil, and diesel fuel.
    - i. Equipment and vessels containing chemicals, such as fire extinguishers, gas cylinders, batteries, and film developing equipment.
  5. Waste Type E: Refrigerants and CFCs
    - a. Refrigerators and freezers.

- b. Air Conditioning units.
  - c. Cryogenic Supplies.
  - d. Bulk storage of refrigerants.
6. Waste Type F: Equipment
- a. Mechanical equipment, such as compressors, generators, compressors, water conditioning vessels, motors, etc.
  - b. Electrical equipment such as televisions, computers, monitors, current controllers, etc.
  - c. Medical equipment such as vital signs monitors, incubators, crash carts, MRIs, ultrasounds, ventilators, dialysis machines, etc.
7. Waste Type G: Radiological Waste
- a. Drummed Radioactive waste.
  - b. Equipment that uses a radioactive source including x-rays, mammograms, CAT scans, electron microscopes, scintillation spectrometers, etc.
  - c. Smoke detectors.
8. Waste Type H: Lead-containing waste.
- a. Lead paint (liquid or containerized paint wastes).
  - b. Lead-contaminated wastes (paint chips, loose debris, etc.).
9. Waste Type I: Other
- a. Drums of hazardous waste generated prior to the start of the contract.
  - b. Wastes accumulated in Crock Pots.
  - c. Lab trap drain wastes.
  - d. Soot encountered in stacks, incinerators, or associated equipment.

### **3.21 HAZARDOUS WASTE PACKAGING AND LABELING**

- A. Package each segregated Hazardous Waste Type in containers for offsite removal and disposal/recycle. **IMPORTANT: Do Not Mix Waste Streams.**
1. Waste Types A, B, C and I, as applicable:
- a. Package in DOT 17-H Open-Top Drums polyethylene disposal bag liners in accordance with 49 CFR Parts 171-180.
  - b. Fill to capacity only with waste.
  - c. Install gasket on lid, apply lock ring, and seal.
  - d. Apply Hazardous Waste Label to drum side.

- e. Enter required DOT shipping data per applicable regulations.
  - f. Adjacent to each label, enter the date indicating when waste was first placed in each drum.
2. Waste Type D - Chemical Wastes
    - a. Package other wastes as applicable in accordance with Hazardous Wastes Resource Conservation and Recovery Act (RCRA), Title 40, Parts 260-299 of the Code of Federal Regulations. Overpack drums shall be required as necessary to complete Work.
  3. Waste Type E - Refrigerants and CFCs:
    - a. Reference Section 3.8 for details
  4. Waste Type F – Equipment:
    - a. Package all equipment in closable and lockable containers for off-site removal. Ensure that all liquids, gases or other regulated materials are removed from equipment, as applicable, prior to placement in containers. Comply with all DOT regulations for each type of equipment.
  5. Waste Type G - Radiological Wastes:
    - a) All radiological equipment shall be packaged and shipped in accordance with 32 IAC 341 regulations.
  6. Waste Type H - Lead-containing Wastes:
    - a) Handle, store, transport, and dispose lead or lead-contaminated waste in accordance with 40 CFR 260, 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 264, and 40 CFR 265.
    - b) Comply with land disposal restriction notification requirements as required by 40 CFR 268.
    - c) Non-hazardous waste may be disposed of as demolition debris (general refuse).
    - d) Submit results of TCLP testing to the EC prior to disposal.
- B. Sealed and Labeled Containers: maintain all containers in a continuously sealed condition after they have been sealed.
1. Do not reopen sealed containers
  2. Do not place additional waste in sealed containers.

### 3.22 TEMPORARY STORAGE

- A. Partially filled containers of hazardous waste may be stored at the Work site for intermittent packaging provided that the following conditions are met:
1. Each container is properly labeled when it is first placed in service, including the date;
  2. Each container remains closed at all times except when compatible waste types are added;



3. Each Work site must be secured and/or attended at all times; and
4. When moved from site to site, each container remains within the geographic boundaries of the facility without moving nor crossing public access highways; and
5. UNDER NO CIRCUMSTANCES WILL THE ACCUMULATED WASTE REMAIN ON SITE BEYOND NINETY (90) DAYS FROM THE DAY THAT ACCUMULATION IN THE CONTAINER WAS INITIATED.

### **3.23 REMOVAL OF HAZARDOUS WASTES**

- A. Immediately seal containers of hazardous waste as each the container is filled. Remove containers of hazardous waste from the Work site within forty-eight (48) hours of being filled.
- B. Transporting filled containers from the Work site to an approved disposal site or recycling center utilizing licensed hauler.
- C. All fluorescent light ballasts shall be removed. Those labeled "NO PCBs" shall be packaged separately from those which indicate PCB or do not indicate PCB condition.
- D. Subject to the Board Representative's approval, the Contractor shall arrange with the electric utility provider for the removal of transformers which are owned by the utility provider from the site.
- E. Subject to the Commission Representative's approval, the contractor shall remove and dispose of all transformers which are not owned by the electric utility provider.
- F. Continuously maintain custody of all hazardous material generated at the Work site including security, short-term storage, transportation and disposition until custody is transferred to an approved disposal site or recycling center.
- G. Do not remove, or cause to be removed, hazardous waste from the Property without a legally executed Uniform Hazardous Waste manifest.
- H. At completion of hauling and disposal of each load, submit copy of waste manifest, chain of custody form, and landfill receipt to the Board Representative.

### **3.24 RECYCLING AND RECOVERY**

- A. Turn over waste which contains materials for which recovery and/or recycling is possible to an approved recycling center. Materials subject to recycling include, but are not limited to:
  1. Fluorescent light tubes.
  2. Lead acid batteries.
  3. Combustible lead-based painted building components and lead-based paint chips.
  4. Televisions and computers.
  5. Ethylene Glycol or other related fluids found within cooling systems.
  6. Mechanical and medical equipment.
  7. Non-PCB-containing oils.
  8. Fuel.

9. Maintenance chemicals.
10. Gas cylinders and fire extinguishers.
11. Lead Shielding Materials.

### **3.25 STORAGE & TRANSPORTATION OF REFRIGERANTS / CFCS**

- A. Use proper storage vessel when recovering refrigerants.
  1. IDOT containers meeting the ARI standard.
  2. Container working pressure rating must comply with IDOT requirements (49 CFR).
    - a. For Refrigerant HCFC-22: Minimum working pressure rating of 260 psig.
    - b. For Refrigerant CFC-11 (Low-Pressure Refrigerants): Drums of steel construction and designated as 17C or 17E.
      - 1) Open top and plastic drums shall not be used.
      - 2) Previously filled, disposable cylinders shall not be used to store or transport recovered refrigerants.
- B. All recovery vessels shall be visually inspected by the Contractor prior to filling. The Contractor shall inspect and provide the following upon request:
  1. Verification of proper IDOT specification.
  2. Pressure rating verification.
  3. Current hydrostatic test date.
  4. Cylinder shall be free of surface dents and imperfections.
- C. Provide required labeling for recovery vessel.
- D. Return all refrigerant to reclamation facilities to be reprocessed to ARI 700 1988 Standards or dispose in an approved facility.
- E. The Contractor shall provide the Commission representative with required documents for CFC Refrigerant/Reclamation within ten (10) days.

### **3.26 REMOVAL OF NON-HAZARDOUS WASTE MATERIAL**

- F. Transport and legally dispose of non-hazardous waste products, materials, residues and refuse at a location not on City's property.
- G. Non-hazardous waste products, materials, residues and refuse include, but are not necessarily limited to:
  1. Materials which are determined to be non-hazardous wastes through objective sampling in accordance with EPA Document SW-846 and laboratory analysis in accordance with EPA Method 1311.
  2. Emptied hazardous material containers: containers holding a material with constituents listed on the SDS as hazardous.

- a. When a container is emptied of its hazardous contents by pouring or scraping so that less than one inch of material remains in the bottom of the container, the container is considered “empty” and is not in itself a hazardous waste.
- b. Emptied hazardous material containers may be disposed of as construction debris waste (i.e. non-hazardous).
  - 1) Personal protective clothing and safety equipment with de minimis or trace contamination.

H. Keep premises in a clean and orderly condition during performance of all Work.

I. Place non-hazardous construction debris wastes in secure containers for local landfill disposal on a daily basis.

**END OF SECTION**

## Additional Information about East Aurora School District 131

East Aurora School District 131 is located in Kane County, approx. 40 miles west of Chicago and serves the portions of the City of Aurora and the Village of Montgomery. The District was organized in 1898 and serves grades K-12. The District operates 2 pre-schools (child development centers), 1 STEAM (grades K-2), 12 elementary schools, 1 Magnet (grades 3-8), 3 middle schools and 2 high schools (one extension high school), and 2 affiliated schools.

District 131 has a Five-year Strategic Plan which states the following:

**Our Mission:** To educate and empower all students to reach their full potential.

**Our Vision:** Our graduates will be confident and productive global citizens committed to improving their community.

**Strategic Goal #1, Equity:** East Aurora School District 131 will meet the diverse needs of all students by ensuring a safe and inclusive learning environment.

**Strategic Goal #2, Operational Excellence:** East Aurora School District 131 will align and utilize systems and resources that promote operational excellence, efficiency, and fiscal accountability.

**Strategic Goal #3, Collaborative Leadership:** East Aurora School District 131 will engage in the continuous cycle of improvement through collaborative, student-focused, and data-driven leadership teams who will monitor and communicate at all levels.

**Strategic Goal #4, Student Achievement:** East Aurora School District 131 will ensure the academic success of all students by closing the opportunity gap.

