SECTION 009113 - ADDENDUM TWO

PART 1 - ADDENDA

- 1.1 PROJECT INFORMATION
 - A. Project Name: 23087 Clinton Reroofing Project
 - B. Owner: Clinton Public School District, 201 Easthaven Drive, Clinton, MS 39060.
 - C. Architect: Dale | Bailey, an Association, One Jackson Place, Suite 250, 188 East Capitol Street, Jackson, MS 39201.
 - D. Architect Project Number: 23087
 - E. Date of Addendum Two: 21 February 2024
- 1.2 NOTICE TO BIDDERS
 - A. This Addendum is issued to all registered plan holders pursuant to the Instructions to Bidders and Conditions of the Contract. This Addendum serves to clarify, revise, and supersede information in the Project Manual, Drawings, and previously issued Addenda. Portions of the Addendum affecting the Contract Documents will be incorporated into the Contract by enumeration of the Addendum in the Owner/Contractor Agreement.
 - B. The Bidder shall acknowledge receipt of this Addendum in the appropriate space on the Bid Form.
 - C. The date for receipt of bids is unchanged by this Addendum at same time and location.

1.3 GENERAL

- A. Attached is the Asbestos Survey and Assessment for Clinton Jr. High School by Pickering Firm dated January 31, 2024.
- B. Typical for all roof renovations Provide HVAC curb adjustments as needed to provide needed warranty.
- 1.4 GENERAL RESPONSES TO REQUESTS FOR INFORMATION
 - A. Question: Addendum 1, 1.6 Revision to Drawings, B, states Sheet A-004 Clinton High School (Site D)... remove all existing skylights...Photo following shows skylights on Clinton Junior High School (Site G), Sheet A-007.Please clarify if the small skylights on Sheet A-007, Clinton Jr High or the very large skylights on Sheet A-004, Clinton HS are to be removed.
 - <u>Answer:</u> Only skylights at Clinton Jr. High are to be removed. All other school skylights are to remain as is.
 - B. <u>Question:</u> Please confirm R-20 or R-25 for the reroofs. Plans call for R-20 per G001 and specs call for R-25.



- <u>Answer:</u> All roof insulation values to be R-25.
- C. <u>Question:</u> Is the finish date 9/2/2024 or 12/1/2024?
 - Answer: Completion date was changed to December 31, 2024, in Addendum 1.
- D. <u>Question:</u> Are there any rain days?

Answer: No.

- E. <u>Question:</u> The scope of work is calling for a recovery board on shingle roofs. Is this correct?
 <u>Answer:</u> Recovery board on Mod bit roofs only, Not shingle roof.
- F. <u>Question:</u> Clinton Park, what is the plan with the coping metal? Replace? Staying?Answer: Replace.
- G. <u>Question:</u> Clinton Park, can we mop down densdeck instead of screw down?

<u>Answer:</u> Mop-down densdeck will be acceptable at Clinton Park.

H. <u>Question:</u> Clinton Jr. High plans has an "Exist. Mtl. Roof" is there work to this roof?

Answer: No - The existing metal roof to remain as-is.

- I. <u>Question:</u> Clinton Jr. High scope of work has wordage on shingle roofs but there are not shingle roofs?
 - <u>Answer:</u> No shingle roofs. Omit General note 2 It is not applicable to CJH.
- J. <u>Question:</u> Sheet A-004, General Notes 1, first paragraph, states "... complete tear-off & replacement...," and second paragraph, states "Completely tear off...," while General Notes 2, first paragraph, states "... recovery board over the existing modified bitumen roofing..." Please clarify if complete tear-off or recover is required.
 - <u>Answer:</u> A complete tear-off and replacement will be required at A-001 Northside/Eastside Schools and A-007 Clinton Jr. High School (where highlighted).
- K. <u>Question:</u> Sheets A-001, A-002, A-005, A-007, General Notes 1, second paragraph, & Sheet A-004, General Notes 2, states "Add (screw down) a new layer...," then further states "using hot application method".
 - <u>Answer:</u> All to be screw-down. Hot application method will be accepted at A-007 Clinton Jr. High.
- L. <u>Question:</u> Please clarify whether mechanical, hot-mopped, or other application method for recovery board is required.
 - <u>Answer:</u> All to be screw-down. Hot application method will be accepted at A-007 Clinton Jr. High.

- M. <u>Question:</u> Shingle roof areas area calling for a recovery board? We assume this is a copy and paste misprint. Please advise.
 - <u>Answer:</u> No recovery board at shingles, via addendum.
- N. Question: The metal roof at the bus barn and Sumner Hill metal roofs call for adhered flute fill, tapered ISO, cover board, and TPO. We do not think you can adhere to a painted metal roof. These are typically Rhinobond assemblies (mechanically attached to purlins and welded to the insulation plates, please advise.
 - <u>Answer:</u> Rhinobond assemblies mechanically attached to purlins and welded to the insulation plates are acceptable.
- O. <u>Question:</u> The roofs are currently sloped to drain, please advise if taper is required.
 - <u>Answer:</u> Match existing conditions.
- 1.5 REVISIONS TO DIVISION 00 PROCUREMENT REQUIREMENTS AND CONTRACTING REQUIREMENTS
 - A. DOCUMENT 004113 BID FORM. Delete this form in its entirety and replace it with new. See attached.
- 1.6 REVISIONS TO TECHNICAL SPECIFICATIONS
 - A. SECTION 028000 REMOVAL OF ASBESTOS CONTAINING MATERIALS. (New).

1.7 REVISIONS TO DRAWINGS

A. Sheet A-001 – Northside/Eastside Elementary Schools and Sheet A-007 – Clinton Jr. High School (Not Reissued). Remove existing roof system to existing structural deck and replace with new roofing system: recovery board, tapered insulation, and modified bitumen roofing where highlighted. Renovations to roof to match existing conditions and meet manufacturer's recommendations.

1.8 ATTACHMENTS

- A. Asbestos Survey and Assessment dated 31 January 2024.
- B. This Addendum includes the following attached Specifications.
 - 1. Specification 004113 Bid Form dated 12 January 2024.
 - 2. Specification -28000 Removal of Asbestos Containing Materials dated 21 February 2024.

END OF ADDENDUM TWO



January 31, 2024

Mr. Bo Barksdale Clinton Public School District P.O. Box 300 Clinton, MS 39060

RE: Asbestos Inspection Clinton Jr. High Roofs

Dear Mr. Barksdale:

You have requested our services with respect to the presence of asbestos-containing materials (ACM) at the above referenced property in Clinton, Mississippi. The purpose of this visit was to identify any ACMs that might be disturbed during planned roofing renovation of the selected roofs at the Clinton Jr. High School in Clinton, MS.

Following our site inspections and sample collection activity, one (1) ACM was identified on these roofs. This conclusion is based on the Environmental Protection Agency's (EPA) definition of ACM as material composed of "...greater than 1% asbestos." The following are ACMs identified:

• Wall/ Penetration Flashing on the Band Hall Roof (CJH-01)

A detailed report of findings that includes ACM material quantities, estimated removal costs, and sample location drawings are enclosed. Should you have any questions concerning this report, please do not hesitate to contact us.

Sincerely, PICKERING FIRM, INC.

Willie J. nester

Willie J. Nester, P.E. MDEQ Certified Asbestos Inspector Enclosure cc: File 21751.54

ASBESTOS SURVEY AND ASSESSMENT



ROOFING RENOVATION CLINTON JR. HIGH SCHOOL CLINTON, MS

PREPARED FOR:

CLINTON PUBLIC SCHOOL DISTRICT P.O. BOX 300 CLINTON, MS 39060

PREPARED BY:

PICKERING FIRM, INC. 2001 AIRPORT ROAD SUITE 201 FLOWOOD, MISSISSIPPI 39232



January 31, 2024 Pickering Project No. 21751.71

TABLE OF CONTENTS

-

27

-

12

| <u>SECT</u> | ION | | PAGE | |
|-------------|---------------|-----------------------------|------|--|
| 1.0 | EXEC | | 1 | |
| 2.0 | FINC | DINGS-ASBESTOS | 2 | |
| 3.0 | RECO | OMMENDATIONS-ASBESTOS | 3 | |
| 4.0 | COST ESTIMATE | | | |
| 5.0 | ΑΡΡΙ | ENDICES | | |
| | 5.1 | Laboratory Analysis Reports | | |
| | 5.2 | Drawings | | |
| | 5.3 | Certifications | | |

1.0 EXECUTIVE SUMMARY

This Asbestos-Containing Material (ACM) survey was performed to identify and assess the condition of suspect roofing materials and to provide recommended response actions based on the scope of the renovation work. This report describes the survey tasks and presents our findings and recommendations. This inspection was limited to the affected roofs at the Clinton Jr. High school, Clinton Jr. High School.

Prior to the initial walk-through inspection of the facilities, special precautions and security/access requirements were coordinated with Mr. Bo Barksdale, of the Clinton Public School District maintenance department. This inspection was necessary due to plans to renovate roofs at at the Clinton Jr. High School. At the time of the inspection, all areas of the roofs were accessible.

During our inspections, all areas of the roofs scheduled for renovation were visually inspected, and the locations of suspected ACM's were noted. After all suspect ACM building components were identified, a minimum of two (2) samples were collected of each homogeneous material for sample analysis. The samples were subsequently labeled and submitted to an accredited laboratory for asbestos analysis by Polarized Light Microscopy (PLM). One (1) material was determined to contain asbestos.

2.0 FINDINGS-ASBESTOS

During the asbestos survey, a total of twenty-nine (29) bulk material samples were collected and analyzed for asbestos content. According to the analytical results, one (1) asbestos containing material was identified on the band hall roof. This conclusion is based on the Environmental Protection Agency (EPA) definition of an ACM as a material composed of "...greater than 1% asbestos." However, a previous inspection of the Elective Center (Former Vo-Tech) identified three material as ACMS. The ACMs identified are as follows:

Wall/Penetration Flashing Coating (HA) CJH-01 located on the roof of the band hall. Laboratory analysis revealed these materials contain approximately 2% and 6% chrysotile asbestos respectively. This material is classified as Category I, non-friable ACM according to National Emission Standard for Hazardous Air Pollutants (NESHAP) regulations.

NON-ACM MATERIALS SAMPLED

Sample analyses indicated that no asbestos was detected in the following materials:

Clinton Jr. High School- Main Building (Including Covered Walkway)

- Built up roof (HA) CJH-01
- Perimeter flashing (HA) CJH-02
- Penetration flashing (HA) CJH-03

Clinton Jr. High School – Back Classroom Building

- Built up roof (HA) CJH-04
- Perimeter flashing (HA) CJH-05
- Penetration flashing (HA) CJH-06

Clinton Jr. High School- Back Cafeteria Roof

- Built up roof (HA) CJH-07
- Perimeter flashing (HA) CJH-08
- Penetration/wall flashing (HA) CJH-09

Clinton Jr. High School- Band Hall

- Built up roof (HA) CJH-10
- Perimeter flashing (HA) CJH-11

3.0 **RECOMMENDATIONS-ASBESTOS**

Considering these findings, NESHAP Regulations 40 CFR 61, Subpart M, requires the removal of ACMs before any renovation or demolition takes place that will disturb those materials and render them friable. Therefore, any future expansion, demolition, or renovation activities at the facility that would impact any of these ACMs should follow the NESHAP regulations. Also, it is recommended that the removal work be designed by a certified asbestos project designer, and that air monitoring be conducted before, during, and after the abatement activity. A renovation project of this type will also require a written notification to be submitted to the Mississippi Department of Environmental Quality (MDEQ) ten (10) days prior to the beginning of the project.

4.0 COST ESTIMATE

The cost estimate table below represents a cost breakdown for the removal of each ACM material identified during the inspection. In developing this cost estimate, we have assumed this material will be included in a single abatement project. The cost estimate does not include abatement design costs or contractor oversight costs. These numbers are only a rough estimate. An asbestos abatement contractor's quote could be significantly higher or lower than the numbers presented here.

Cost Breakdown for Removal of ACM

| | | | Removal | | |
|-------------------|--|----------|----------------|------------|--|
| Location | Material | Quantity | Unit Cost | Total Cost | |
| Band Hall Roof | Penetration/wall flashing coating (CJH-09) | 100 SF | \$25.00/SF | \$2,500.00 | |
| | | A | batement Total | \$2,500.00 | |

* - The square footage presented here is only a rough estimate; contractors should obtain their own measurements prior to submitting a cost estimate or bid.

5.0 APPENDICES

 \simeq

8. 80

APPENDIX 5.1 LABORATORY ANALYSIS REPORTS

 \sim

| EMSL | EMSL Analytical, Inc. 200 Route 130 North Cinnaminson, NJ 08077 Tel/Fax: (800) 220-3675 / (856) 786-5974 http://www.EMSL.com / cinnasblab@EMSL.com | EMSL Order: Customer ID: Customer PO: Project ID: | |
|------------|---|--|-------------------------|
| Attention: | Willie Nester | Phone: | (601) 259-6671 |
| | Pickering Firm, Inc. | Fax: | (601) 956-7817 |
| | 2001 Airport Road | Received Date: | 01/26/2024 9:20 AM |
| | Suite 201 | Analysis Date: | 01/29/2024 - 01/30/2024 |
| | Flowood, MS 39232 | Collected Date: | 01/25/2024 |
| Project: | 21751.71 - Task 001 / Clinton Jr High Roofs Inspection / Classroo | oom - Cafeteria - Band Hall | |

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

| | | | Non-Asbe | stos | <u>Asbestos</u> |
|------------------------|-----------------------------|--------------------------------------|---------------|--------------------------|-----------------|
| Sample | Description | Appearance | % Fibrous | % Non-Fibrous | % Туре |
| CJH-01-01-Roofing | B/U Roof Main Clsrm Bldg | Black Fibrous | 5% Cellulose | 95% Non-fibrous (Other) | None Detected |
| 042401711-0001 | | Homogeneous | | | |
| CJH-01-01-Tar Felt | B/U Roof Main Clsrm Bldg | Black Fibrous | 30% Glass | 70% Non-fibrous (Other) | None Detected |
| 042401711-0001A | | Homogeneous | | | |
| CJH-01-01-Insulation | B/U Roof Main Clsrm Bldg | Tan Fibrous | 95% Cellulose | 5% Non-fibrous (Other) | None Detected |
| 042401711-0001B | | Homogeneous | | | |
| CJH-01-01-Tar Felt 2 | B/U Roof Main Clsrm Bldg | Black Fibrous | 30% Glass | 70% Non-fibrous (Other) | None Detected |
| 042401711-0001C | | Homogeneous | | | |
| CJH-01-01-Insulation 2 | B/U Roof Main Clsrm Bldg | Yellow Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| | Bill Boof Main Olawa | | 000/ 0-000 | | |
| CJH-01-02-Insulation | B/U Roof Main Clsrm Bldg | Tan Fibrous Homogeneous | 90% Cellulose | 10% Non-fibrous (Other) | None Detected |
| | DUD-OL | Homogeneous | 200% (C) | | |
| CJH-01-02-Tar Felt | B/U Roof Main Clsrm Bldg | Black Fibrous | 30% Glass | 70% Non-fibrous (Other) | None Detected |
| 042401711-0002A | | Homogeneous | | | |
| CJH-01-02-Insulation 2 | B/U Roof Main Clsrm Bidg | Yellow Non-Fibrous | | 100% Non-fibrous (Other) | None Detected |
| 042401711-0002B | | Homogeneous | | | |
| CJH-01-02-Tar Paper | B/U Roof Main Clsrm Bldg | Black Fibrous | 30% Cellulose | 70% Non-fibrous (Other) | None Detected |
| 042401711-0002C | | Homogeneous | | | |
| CJH-01-03-Roofing | B/U Roof Main Clsrm Bldg | Black Fibrous | 5% Cellulose | 95% Non-fibrous (Other) | None Detected |
| 042401711-0003 | | Homogeneous | | | |
| CJH-01-03-Tar | B/U Roof Main Clsrm Bldg | Black Non-Fibrous | | 100% Non-fibrous (Other) | None Detected |
| 042401711-0003A | | Homogeneous | | | |
| CJH-01-03-Insulation | B/U Roof Main Clsrm Bldg | Tan Non-Fibrous | 95% Cellulose | 5% Non-fibrous (Other) | None Detected |
| 042401711-0003B | | Homogeneous | | | |
| CJH-01-04-Roofing | B/U Roof Main Clsrm Bldg | Black Non-Fibrous | 10% Cellulose | 90% Non-fibrous (Other) | None Detected |
| 042401711-0004 | | Homogeneous | | | |
| CJH-01-04-Tar Felt | B/U Roof Main Clsrm Bldg | Black Fibrous | 30% Glass | 70% Non-fibrous (Other) | None Detected |
| 042401711-0004A | | Homogeneous | | | |
| CJH-01-04-Insulation | B/U Roof Main Clsrm Bldg | Brown Fibrous | 95% Cellulose | 5% Non-fibrous (Other) | None Detected |
| 042401711-0004B | | Homogeneous | | | |
| CJH-01-04-Tar | B/U Roof Main Clsrm Bldg | Black Non-Fibrous | | 100% Non-fibrous (Other) | None Detected |
| 042401711-0004C | | Homogeneous | | | |



200 Route 130 North Cinnaminson, NJ 08077 Tel/Fax: (800) 220-3675 / (856) 786-5974 http://www.EMSL.com / cinnasblab@EMSL.com EMSL Order: 042401711 Customer ID: POWE54 Customer PO: Project ID:

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

| | | | <u>Non-Asbe</u> | stos | Asbestos |
|--|---------------------------------|--|--------------------------|--------------------------|------------------|
| Sample | Description | Appearance | % Fibrous | % Non-Fibrous | % Туре |
| CJH-02-01 | Perimeter Main Front Walkway | Black Fibrous | 3% Cellulose 2% Glass | 95% Non-fibrous (Other) | None Detected |
| 042401711-0005 | | Homogeneous | | | |
| CJH-02-02 | Perimeter Main Front Walkway | Black Fibrous | 2% Cellulose | 98% Non-fibrous (Other) | None Detected |
| 042401711-0006 | | Homogeneous | | | |
| CJH-02-03 | Perimeter Main Front Walkway | Black Fibrous | 2% Cellulose 6% Glass | 92% Non-fibrous (Other) | None Detected |
| 042401711-0007 | | Homogeneous | | | |
| CJH-02-04 | Perimeter Main Front Walkway | Black Non-Fibrous | 2% Cellulose | 98% Non-fibrous (Other) | None Detected |
| 042401711-0008 | | Homogeneous | | | |
| CJH-03-01-Silver Paint | Penetration Main | Black/Silver Non-Fibrous | | 100% Non-fibrous (Other) | None Detected |
| 042401711-0009 Resull includes a small amou | nt of insenarable attached ma | Heterogeneous | | | |
| | | | | | |
| CJH-03-01-Tar 042401711-0009A | Penetration Main | Black Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| | Depetration Main | | | 100% Non Shares (Other) | Name D. J. J. J. |
| CJH-03-02-Silver Paint | Penetration Main | Black/Silver Non-Fibrous Heterogeneous | | 100% Non-fibrous (Other) | None Detected |
| Result includes a small amou | nt of inseparable attached ma | - | | | |
| CJH-03-02-Tar | Penetration Main | Black Non-Fibrous | | 100% Non-fibrous (Other) | None Detected |
| 042401711-0010A | | Homogeneous | | | |
| CJH-03-03-Silver Paint | Penetration Main | Silver | | 100% Non-fibrous (Other) | None Detected |
| 042401711-0011 | | Non-Fibrous Heterogeneous | | | |
| Result includes a small amour | nt or inseparable attached mai | enai | | | |
| CJH-03-03-Tar | Penetration Main | Black Fibrous | 7% Cellulose 5% Glass | 88% Non-fibrous (Other) | None Detected |
| 042401711-0011A | | Homogeneous | | | |
| CJH-04-01-Roofing | B/U Roof Back Classroom | Black Non-Fibrous | | 100% Non-fibrous (Other) | None Detected |
| | | Homogeneous | | | |
| CJH-04-01-Tar Felt | B/U Roof Back Classroom | Black Fibrous | 30% Glass | 70% Non-fibrous (Other) | None Detected |
| 042401711-0012A | DALD (F.) | Homogeneous | | | |
| CJH-04-01-Insulation | B/U Roof Back Classroom | Tan Fibrous Homogeneous | 95% Cellulose | 5% Non-fibrous (Other) | None Detected |
| | DUD (D.) | Homogeneous | | | |
| CJH-04-01-Tar Paper | B/U Roof Back Classroom | Black Fibrous | 30% Cellulose | 70% Non-fibrous (Other) | None Detected |
| CJH-04-01-Insulation 2 | B/U Roof Back | Yellow | | 100% Non-fibrous (Other) | None Detected |
| 042401711-0012D | Classroom | Non-Fibrous | | | |
| | D/U Deef Deel | Homogeneous | 00/ 0 . !! . ! | | |
| CJH-04-02-Roofing | B/U Roof Back Classroom | Black Non-Fibrous Homogeneous | 8% Cellulose | 92% Non-fibrous (Other) | None Detected |
| | D/U Deef Dirt | Homogeneous | 1091 01 | | |
| CJH-04-02-Tar Felt | B/U Roof Back Classroom | Black Fibrous | 40% Glass | 60% Non-fibrous (Other) | None Detected |
| 042401711-0013A | | Homogeneous | | | |
| CJH-04-02-Tar Paper | B/U Roof Back Classroom | Black Non-Fibrous | 30% Cellulose | 70% Non-fibrous (Other) | None Detected |
| 042401711-0013B | | Homogeneous | | | |



200 Route 130 North Cinnaminson, NJ 08077 Tel/Fax: (800) 220-3675 / (856) 786-5974 http://www.EMSL.com / cinnasblab@EMSL.com EMSL Order: 042401711 Customer ID: POWE54 Customer PO: Project ID:

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

| Sample CJH-04-02-Insulation | Description | Appearance | % Fibrous | % Non-Fibrous | % Type |
|---|-------------------------------------|---------------------------------|----------------------------|--------------------------|---------------|
| | D/II Deef Deek | Desure | 0594 0 allula a a | | |
| 042401711-0013C | B/U Roof Back Classroom | Brown Fibrous Homogeneous | 95% Cellulose | 5% Non-fibrous (Other) | None Detected |
| CJH-05-01 | Perimeter Flash Back | Black | | 100% Non-fibrous (Other) | None Detected |
| 042401711-0014 | Classroom | Non-Fibrous Homogeneous | | | None Detected |
| CJH-05-02 | Perimeter Flash Back | Black | | | New Delevier |
| 042401711-0015 | Classroom | Non-Fibrous | | 100% Non-fibrous (Other) | None Detected |
| | | Homogeneous | | | |
| CJH-06-01-Silver Paint | Penetration Flash Back Classroom | Black/Silver Non-Fibrous | | 100% Non-fibrous (Other) | None Detected |
| 042401711-0016 Resull includes a small amour | nt of insenarable atlached ma | Heterogeneous | | | |
| CJH-06-01-Tar | Penetration Flash | Black | | | Nega Detected |
| 042401711-0016A | Back Classroom | Non-Fibrous Homogeneous | | 100% Non-fibrous (Other) | None Detected |
| | Bonotration Flash | | | | New Detected |
| CJH-06-02-Silver Paint | Penetration Flash Back Classroom | Black Non-Fibrous | | 100% Non-fibrous (Other) | None Detected |
| 042401711-0017 Resull includes a small amour | nt of inseparable attached ma | Heterogeneous rerial | | | |
| | | | | | |
| CJH-06-02-Tar | Penetration Flash Back Classroom | Black Non-Fibrous | | 100% Non-fibrous (Other) | None Detected |
| 042401711-0017A | | Homogeneous | | | |
| CJH-07-01-Insulation | B/U Roof Back Cafeteria | Tan Fibrous | 95% Cellulose | 5% Non-fibrous (Other) | None Detected |
| 042401711-0018 | | Homogeneous | | | |
| CJH-07-01-Tar Paper | B/U Roof Back Cafeteria | Black Fibrous | 30% Cellulose | 70% Non-fibrous (Other) | None Detected |
| 042401711-0018A | | Homogeneous | | | |
| CJH-07-01-Tar Felt | B/U Roof Back Cafeteria | Black Fibrous | 30% Glass | 70% Non-fibrous (Other) | None Detected |
| 042401711-0018B | | Homogeneous | | | |
| CJH-07-02-Insulation | B/U Roof Back Cafeteria | Brown Fibrous | 95% Cellulose | 5% Non-fibrous (Other) | None Detected |
| 042401711-0019 | | Homogeneous | | | |
| CJH-07-02-Tar Paper | B/U Roof Back Cafeteria | Brown/Black Fibrous | 45% Cellulose 10% Glass | 45% Non-fibrous (Other) | None Detected |
| 042401711-0019A | | Homogeneous | | | |
| CJH-07-02-Tar Felt | B/U Roof Back Cafeteria | Black Fibrous | 35% Glass | 65% Non-fibrous (Other) | None Detected |
| 042401711-0019B | | Homogeneous | | | |
| CJH-07-02-Tar | B/U Roof Back Cafeteria | Black Non-Fibrous | | 100% Non-fibrous (Other) | None Detected |
| 042401711-0019C | | Homogeneous | | | |
| CJH-08-01 | Perimeter Back Cafeteria | Black Fibrous | 30% Glass | 70% Non-fibrous (Other) | None Detected |
| 042401711-0020 | | Homogeneous | | | |
| CJH-08-02 | Perimeter Back Cafeteria | Black Non-Fibrous | | 100% Non-fibrous (Other) | None Detected |
| 042401711-0021 | | Homogeneous | | | |
| CJH-09-01-Silver Paint | Penetration Wall Back Cafeteria | Black/Silver Non-Fibrous | | 100% Non-fibrous (Other) | None Detected |
| 042401711-0022 | | Heterogeneous | | | |
| Result includes a small amoun | t of inseparable attached mat | erial | | | |
| CJH-09-01-Tar | Penetration Wall Back Cafeteria | Black Non-Fibrous | | 100% Non-fibrous (Other) | None Detected |
| | | | | | |



200 Route 130 North Cinnaminson, NJ 08077 Tel/Fax: (800) 220-3675 / (856) 786-5974 http://www.EMSL.com / cinnasblab@EMSL.com EMSL Order: 042401711 Customer ID: POWE54 Customer PO: Project ID:

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

| | | | Non-Asbe | stos | Asbestos |
|------------------------|------------------------------------|-----------------------------|---------------------------|--------------------------|----------------|
| Sample | Description | Appearance | % Fibrous | % Non-Fibrous | % Туре |
| CJH-09-02 | Penetration Wall Back Cafeteria | Black Non-Fibrous | 15% Cellulose | 85% Non-fibrous (Other) | None Detected |
| 042401711-0023 | | Homogeneous | | | |
| CJH-10-01-Roofing | B/U Roof Band Hall | Black Non-Fibrous | 5% Cellulose 15% Glass | 80% Non-fibrous (Other) | None Detected |
| 042401711-0024 | | Homogeneous | | | |
| CJH-10-01-Tar Felt | B/U Roof Band Hall | Black Fibrous | 30% Glass | 70% Non-fibrous (Other) | None Detected |
| 042401711-0024A | | Homogeneous | | | |
| CJH-10-01-Insulation | B/U Roof Ban <mark>d Hall</mark> | Yellow Non-Fibrous | | 100% Non-fibrous (Other) | None Detected |
| 042401711-0024B | | Homogeneous | | | |
| CJH-10-02-Roofing | B/U Roof Band Hall | Black Non-Fibrous | 15% Cellulose | 85% Non-fibrous (Other) | None Detected |
| 042401711-0025 | | Homogeneous | | | |
| CJH-10-02-Tar Felt | B/U Roof Band Hall | Black Fibrous | 5% Cellulose 15% Glass | 80% Non-fibrous (Other) | None Detected |
| 042401711-0025A | | Homogeneous | | | |
| CJH-10-02-Tar | B/U Roof Band Hall | Black Non-Fibrous | | 100% Non-fibrous (Other) | None Detected |
| 042401711-0025B | | Homogeneous | | | |
| CJH-10-02-Insulation | B/U Roof Band Hall | Yellow Non-Fibrous | | 100% Non-fibrous (Other) | None Detected |
| 042401711-0025C | | Homogeneous | | | |
| CJH-11-01 | Perimeter Flash Band Hall | Black Fibrous | 30% Glass | 70% Non-fibrous (Other) | None Detected |
| 042401711-0026 | | Homogeneous | | | |
| CJH-11-02-Tar Felt | Perimeter Flash Band Hall | Black Fibrous | 5% Glass | 95% Non-fibrous (Other) | None Detected |
| 042401711-0027 | | Homogeneous | | | |
| CJH-11-02-Tar | Perimeter Flash Band Hall | Black Non-Fibrous | | 100% Non-fibrous (Other) | None Detected |
| 042401711-0027A | | Homogeneous | | | |
| CJH-12-01-Silver Paint | Penetration B/H | Black/Silver Non-Fibrous | | 100% Non-fibrous (Other) | <1% Chrysotile |
| 042401711-0028 | | Heterogeneous | | | |
| CJH-12-01-Tar | Penetration B/H | Black Non-Fibrous | 3% Cellulose | 91% Non-fibrous (Other) | 6% Chrysotile |
| 042401711-0028A | | Homogeneous | | | |
| CJH-12-02-Silver Paint | Penetration B/H | Silver Non-Fibrous | | 100% Non-fibrous (Other) | <1% Chrysotile |
| 042401711-0029 | | Homogeneous | | | |
| CJH-12-02-Tar | Penetration B/H | Black Fibrous | 10% Cellulose 3% Glass | 85% Non-fibrous (Other) | 2% Chrysotile |
| 042401711-0029A | | Homogeneous | | | |



200 Route 130 North Cinnaminson, NJ 08077 Tel/Fax: (800) 220-3675 / (856) 786-5974 http://www.EMSL.com / cinnasblab@EMSL.com EMSL Order: 042401711 Customer ID: POWE54 Customer PO: Project ID:

Analyst(s)

Michael Bocchicchio (18) Brett Teixeira (10) Amiri Lewis (39)

montha king

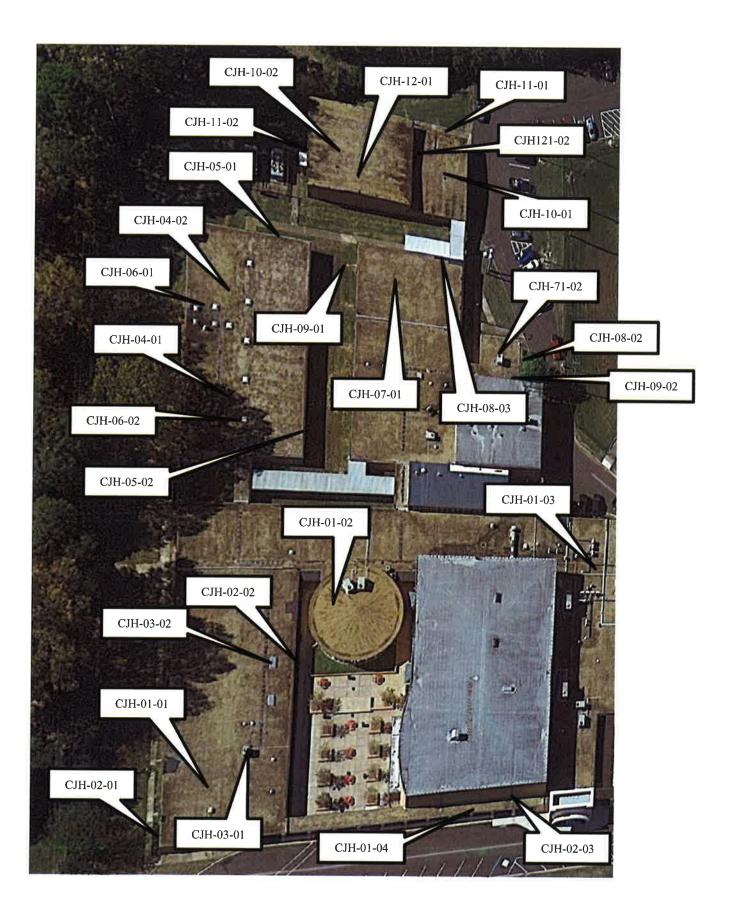
Samantha Rundstrom, Laboratory Manager or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 800/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e., linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA LAP, LLC-IHLAP Lab 100194, PA ID# 68-00367, LA #04127

APPENDIX 5.2 SAMPLE LOCATIONS

-



APPENDIX 5.3 CERTIFICATIONS

З.

State of Mississippi

Department of Environmental Quality Office of Pollution Control

Certificate of Licensure

In accordance with the Asbestos Abatement Accreditation and Certification Act, Enacted as 1989 Mississippi Law, Chapter 505

Be it known that

Willie J. Nester

Having submitted acceptable evidence of qualifications and training and other appropriate information, is hereby granted this

Asbestos Inspector

Certification

Shen Mallen

Chief, Asbestos & Lead Branch

Certificate No.: ABI-00002244 Expiration Date: Jan 24th, 2025 Training Expires on Jan 24th, 2025

40546 LIC20240001

DOCUMENT 004113 - BID FORM - STIPULATED SUM (SINGLE-PRIME CONTRACT)

1.1 BID INFORMATION

- A. Bidder: _____
- B. Project Name: 23087 Clinton Reroofing Project:
- C. Project Locations:
 - 1. **Contract A :** Northside/Eastside Elementary School : 453 Arrow Drive, Clinton, MS 39056.
 - 2. **Contract B**: Clinton Park Elementary School : 501 Arrow Drive, Clinton, MS 39056.
 - 3. **Contract C : C**linton Public School District Bus Barn : 525 Springridge Road, Clinton, MS 39056.
 - 4. **Contract D**: Clinton High School : 401 Arrow Drive, Clinton, MS 39056.
 - 5. Contract E : Summer Hill Junior High School : 400 W Northside Drive, Clinton, MS 39056.
 - 6. **Contract F**: Lovett Elementary School : 2002 W Northside Drive, Clinton, MS 39056.
 - 7. Contract G : Clinton Junior High School : 711 W Lakeview Drive, Clinton, MS 39056.
- A. Owner: Clinton Public School District, 201 Easthaven Drive, Clinton, MS 39060.
 - 1. Owner's Representative: Bo Barksdale, Director, Buildings and Grounds, Clinton Public School District.
- D. Architect: Dale | Bailey Architects, An Association, One Jackson Place, Suite 250, 188 East Capitol Street, Jackson, MS 39201.
- E. Architect Project Number: 23087.

1.2 CERTIFICATIONS AND BASE BID

2.

- A. Base Bid, Single-Prime (All Trades) Contract: The undersigned Bidder, having carefully examined the Procurement and Contracting Requirements, Conditions of the Contract, Drawings, Specifications, and all subsequent Addenda, as prepared by Dale|Bailey, an Association and Architect's consultants, having visited the site, and being familiar with all conditions and requirements of the Work, hereby agrees to furnish all material, labor, equipment and services, including all scheduled allowances, necessary to complete the construction of the above-named project, according to the requirements of the Procurement and Contracting Documents, for the stipulated sum of:
 - 1. **Contract A :** Northside/Eastside Elementary School

| | Dollars |
|---|---------|
| (\$). | |
| Contract B : Clinton Park Elementary School | |

Dollars

100% Construction Documents BID FORM - STIPULATED SUM (SINGLE-PRIME CONTRACT) 004113 Page 1 of 4

Copyright © 2024 by the American Institute of Architects. Warning: This AIA MasterSpec-based document is protected by U.S. Copyright Law and International Treaties. It was created by "Dale Partners Architects" for "23087 Clinton Reroofing Project". A valid, current MasterSpec license is required for editing and use of this document for any other project.(24680)

| D B 230 | 087 | Addendum Two Clinton Reroofing Project 21 Febru Clinton, Mississippi | ary 2024 |
|---------|-----|---|------------|
| | | (\$). | |
| | 3. | Contract C : Clinton Public School District Bus Barn | |
| | | | Dollars |
| | | (\$). | _ |
| | | Contract D : Clinton High School | |
| | | | _ Dollars |
| | | (\$). | |
| | 4. | Contract E : Summer Hill Junior High School | |
| | | | _ Dollars |
| | | (\$). | |
| | | Contract F : Lovett Elementary School | |
| | | | _ Dollars |
| | | (\$). | |
| | | Contract G : Clinton Junior High School : | |
| | | | _Dollars |
| | | (\$). | |
| | | NOTE: Contractors can bid on select contracts as de The Owner reserves the right to award contracts sepa | |
| | | The above amounts may be modified by amounts indicated by the Bidder on the Document 004322 "Unit Prices Form". | e attached |
| 1.3 | | WANCES. Include the allowances below in the base bid. Refer to section WANCES. | 012100- |
| A. | | vance No. 01: Lump Sum Contingency Allowance of Ten Thousand Dollars (\$10, iside/Eastside Elementary School. | 000.00) at |
| В. | | vance No. 02: Lump Sum Contingency Allowance of Ten Thousand Dollars (\$10,0 on Park Elementary School. | 000.00) at |
| C. | | rance No. 03: Lump Sum Contingency Allowance of Five Thousand Dollars (\$5,0 on Public School District Bus Barn. | 000.00) at |
| D. | | vance No. 04: Lump Sum Contingency Allowance of Ten Thousand Dollars (\$10,0 on High School. | 000.00) at |
| E. | | rance No. 05: Lump Sum Contingency Allowance of Ten Thousand Dollars (\$10,0 ner Hill Junior High School. | 000.00) at |

 100% Construction Documents
 BID FORM - STIPULATED SUM (SINGLE-PRIME CONTRACT)
 004113 Page 2 of 4

 Copyright © 2024 by the American Institute of Architects. Warning: This AIA MasterSpec-based document is protected by U.S. Copyright Law and International Treaties.

for any other project.(24680)

It was created by "Dale Partners Architects" for "23087 Clinton Reroofing Project". A valid, current MasterSpec license is required for editing and use of this document

- F. Allowance No. 06: Lump Sum Contingency Allowance of Five Thousand Dollars (\$5,000.00) at Lovett Elementary School.
- G. Allowance No. 07: Lump Sum Contingency Allowance of Ten Thousand Dollars (\$10,000.00) at Clinton Junior High School.
- 1.4 UNIT RATES. Refer to Section 012200 Unit Prices for description of unit Prices.
 - A. Unit Price 01: Replacement of wood blocking \$_____/ LF.
 - B. Unit Price 02: Replacement of tapered insulation____/SF.

1.5 BID GUARANTEE

- A. The undersigned Bidder agrees to execute a contract for this Work in the above amount and to furnish surety as specified within 10. days after a written Notice of Award, if offered within 90 days after receipt of bids, and on failure to do so agrees to forfeit to Owner the attached cash, cashier's check, certified check, U.S. money order, or bid bond, as liquidated damages for such failure, in the following amount constituting five percent (5%) of the Base Bid amount above:
 - 1. _____ Dollars
 - (\$_____).
- B. In the event Owner does not offer Notice of Award within the time limits stated above, Owner will return to the undersigned the cash, cashier's check, certified check, U.S. money order, or bid bond.

1.6 SUBCONTRACTORS AND SUPPLIERS

- A. The following companies shall execute subcontracts for the portions of the Work indicated:
 - 1. Roofing Work:

1.7 TIME OF COMPLETION

A. The undersigned Bidder proposes and agrees hereby to commence the Work of the Contract Documents on a date specified in a written Notice to Proceed to be issued by Architect and shall fully complete the Work within the Contract completion date of December 31, 2024. The work is subject to liquidated damages. Liquidated damages will be \$500.00 per day, per school.

1.8 ACKNOWLEDGMENT OF ADDENDA

- A. The undersigned Bidder acknowledges receipt of and use of the following Addenda in the preparation of this Bid:
 - 1. Addendum No. 1, dated _____.
 - 2. Addendum No. 2, dated _____.

100% Construction Documents BID FORM - STIPULATED SUM (SINGLE-PRIME CONTRACT) 004113 Page 3 of 4

Copyright © 2024 by the American Institute of Architects. Warning: This AIA MasterSpec-based document is protected by U.S. Copyright Law and International Treaties. It was created by "Dale Partners Architects" for "23087 Clinton Reroofing Project". A valid, current MasterSpec license is required for editing and use of this document for any other project.(24680)

- 3. Addendum No. 3, dated ______.
- 4. Addendum No. 4, dated _____.

1.9 BID SUPPLEMENTS

- A. The following supplements are a part of this Bid Form and are attached hereto.
 - 1. Bid Form Supplement Bid Bond Form (AIA Document A310-2010).

1.10 CONTRACTOR'S LICENSE

A. The undersigned further states that it is a duly licensed contractor for the type of work proposed, in Mississippi, and that all fees, permits, etc., pursuant to submitting this proposal have been paid in full.

1.11 SUBMISSION OF BID

| Α. | Respectfully submitted this | day of, 2024. |
|----|-----------------------------|---|
| В. | Submitted By: | (Name of bidding firm or corporation). |
| C. | Authorized Signature: | (Handwritten signature). |
| D. | Signed By: | (Type or print name). |
| E. | Title: | (Owner/Partner/President/Vice President). |
| F. | Witnessed By: | (Handwritten signature). |
| G. | Attest: | (Handwritten signature). |
| Н. | Ву: | (Type or print name). |
| I. | Title: | (Corporate Secretary or Assistant Secretary). |
| J. | Street Address: | |
| K. | City, State, Zip: | |
| L. | Email: | |
| M. | Phone: | |
| N. | License No.: | |
| Ο. | Federal ID No.: | (Affix Corporate Seal Here). |
| | | |

END OF DOCUMENT 004113

100% Construction Documents

BID FORM - STIPULATED SUM (SINGLE-PRIME CONTRACT)

004113 Page 4 of 4

Copyright © 2024 by the American Institute of Architects. Warning: This AIA MasterSpec-based document is protected by U.S. Copyright Law and International Treaties. It was created by "Dale Partners Architects" for "23087 Clinton Reroofing Project". A valid, current MasterSpec license is required for editing and use of this document for any other project.(24680)

SECTION 02 80 00 REMOVAL OF ASBESTOS CONTAINING MATERIALS CLINTON JR. HIGH SCHOOL _BAND HALL ROOF RENOVATIONS CLINTON SCHOOL DISTRICT CLINTON, MS

PART 1

1.1 Contractor Requirements

- A. The Asbestos Abatement Contractor (AAC) shall be licensed by the State of Mississippi as an Asbestos Abatement Contractor.
- B. The AAC must be covered by asbestos specific liability insurance in the minimum amount of \$1,000,000. This insurance must cover not only the AAC, but the Owner, Professional and General Contractor for any job-related accident that is the fault of the AAC. The Contractor shall present documentation that this coverage has been obtained.

1.2 Scope of Work

- A. This specification covers the abatement of exposure to asbestos hazards from building structures and components listed in B. It is the intent of the Contract Documents to show all of the work necessary to complete the project. Drawing AS-1 show approximate locations of asbestos containing materials (ACM) to be removed and disposed of.
- B. This project covers the entire removal and appropriate disposition of all asbestos containing materials on the Roof of the band hall at the Clinton Jr. High School in Clinton, MS.

Remove all ACM roof wall and penetration flashing coating out 12 inches from the edge and down to the deck in the locations shown on attached drawing AS-1. Penetration include heater flues, plumbing vents, exhaust fans, etc. Coordinate work with roofing contractor so that replacement materials are installed same day as abatement of ACM roofing materials.

C. Estimated Quantities

The AAC shall obtain his own quantities of ACM materials to be removed prior to bidding or quoting the work contained herein. The following quantities are estimates only

| Wall flashing , | 115 LF |
|----------------------|--------|
| Penetration Flashing | 20 SF |

1.3 Description of Work

- A. The work specified herein shall be the removal of asbestos containing materials by competent persons trained, knowledgeable and qualified in the techniques of abatement, handling and disposal of asbestos-containing and asbestos-contaminated materials and the subsequent cleaning of contaminated areas, who comply with applicable Federal, State, and Local regulations and are capable of and willing to perform the work of this Contract.
- B. The AAC shall supply all labor, materials services, insurance, permits and equipment necessary to carry out the work in accordance with all applicable Federal, State and Local regulations and these specifications.
- C. Not applicable.
- D. The AAC is responsible for restoring the work area and auxiliary areas utilized during the abatement to conditions equal to or better than original. Any damages caused during the performance of abatement activities shall be repaired by the AAC (e.g. paint peeled off by barrier tape, nail holes, water damage, broken glass, damage to building exterior or grounds) at no additional expense to the Building Owner.
- F. The AAC is responsible for ensuring that the inside of the building is protected from water or weather while asbestos removal is taking place and that replacement roofing is promptly installed or applied over the areas of abatement to prevent water penetration into the building after abatement has taken place.
- F. Schedule
 - 1. Schedule of Work

The AAC shall coordinate his work schedule with the General Contractor in order for the General Contractor to comply with any deadlines listed elsewhere in this specification.

1.4 Applicable Standards and Guidelines

- A. General Requirements
 - 1. All work under this Contract shall be done in strict accordance with all applicable Federal, State and Local regulations, standards and codes governing asbestos abatement and any other trade work done in conjunction with the abatement.

- 2. The most recent edition of any relevant regulation, standard, document or code shall be in effect. Where conflict among the requirements or with these specifications exists, the most stringent requirements shall be utilized.
- 3. Copies of all standards, regulations, codes and other applicable documents, including this specification and those listed in Section 1.5, A shall be available at the worksite in the clean change area of the worker decontamination system.
- B. Specific requirements
 - 1. Occupational Safety and Health Administration (OSHA)
 - a. Title 29 Code of Federal Regulations Section 1910.1001 -General Industry Standard for Asbestos.
 - b. Title 29 Code of Federal Regulations Section 1910.134 -General Industry Standard for Respiratory Protection.
 - c. Title 29 Code of Federal Regulations Section 1926 Construction Industry.
 - d. Title 29 Code of Federal Regulations Section 1910.2 Access to Employee Exposure and Medical Records.
 - e. Title 29 Code of Federal Regulations Section 1910.1200 -Hazard Communication
 - 2. Environmental Protection Agency (EPA)
 - a. Title 40 Code of Federal Regulations Section 61 Subparts A and M (Revised Subpart B) - National Emission Standard For Asbestos
 - 3. These specifications and any applicable drawings in their entirety, are to be a part of any subcontract let by the General Contractor on this project. The General Contractor will be held responsible for the whole actions by any of his subcontractors or their employees. All sections and provisions of this specification and any drawings that are a part of this specification are to be adhered to by any subcontractor on this project. The General Contractor will be responsible for supervising his subcontractors.
- 1.5 <u>Submittals and Notices</u>

- A. AAC shall:
 - 1. Prior to Commencement of Work:
 - a. Should abatement projects involve greater than 260 linear feet of pipe insulation or 160 square feet of sprayed, troweled or otherwise applied material or covering or composing building structures or components, this AAC will send notification in accordance with 40 CFR Part 61.146 of Subpart M, to the appropriate State or Federal air pollution control agency responsible for the enforcement of the National Emission Standard for Asbestos at least ten (10) days prior to the commencement of <u>any</u> on-site project activity. Provide Project Designer with a copy of the notice.
 - b. Submit proof satisfactory to the Building Owner and Project Designer that required permits, site location and arrangements for transport and disposal of asbestos containing waste materials have been made. Obtain and submit a copy of the letter from the landfill stating that it is qualified to dispose of asbestos containing material.
 - c. Submit documentation satisfactory to the Building Owner and Project Designer that the AAC's employees, including foreman, supervisors and any other company personnel or agents who may be exposed to airborne asbestos fibers or who may be responsible for any aspects of abatement activities, have received appropriate license from the Mississippi Department of Environmental Quality
 - 2. During Abatement Activities
 - a. Submit weekly job progress reports detailing abatement activities. Include review of progress with respect to previously established milestones and schedules, major problems and action taken, injury reports, equipment breakdown and bulk material and air sampling results conducted by AAC's Air Sampling Professional.
 - b. Submit copies of all transport manifests, trip tickets and disposal receipts for all asbestos waste materials removed from the work area during the abatement process.
 - c. Submit daily, copies of worksite entry logbooks with information on worker and visitor access.

- d. The AAC will maintain "ON SITE" and available for inspection at any time by authorized persons copies of all Accreditation Certificates for each and every person working on this Project, for which accreditation is required. Employees requiring certification include but are not limited to, Supervisors and all Abatement workers. Each worker must have some type of I.D. card at the job site available for inspection by appropriate personnel.
- B. Owner Shall:
 - 1. Prior to Commencement of Work
 - a. 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 relocation of desks, files, equipment and personal possessions to avoid unauthorized access into the work area.
 - b. Submit to the AAC, results of pre-abatement air sampling (if conducted) including location of samples, names of the Air Sampling Professional, equipment utilized and method of analysis.
 - c. Document that Owner's employees who will be required to enter the work area during abatement have received appropriate training and certification.
 - 2. During Abatement
 - a. Submit to the AAC, results of bulk material analysis and air sampling data collected during the course of the abatement. These sample results are for information only. They serve only to monitor AAC performance during the project and shall not release the AAC from any responsibility to sample for OSHA compliance.

1.6 <u>Execution</u>

- A. The AAC shall cover any vents, heater flues, exhaust fans with polyethylene sheeting to prevent potential asbestos fibers from entering into the building.
- B. The AAC shall keep the roofing material wet while removing the asbestos roofing by applying a mist of amended water during abatement. Do not allow excess water to leak into the building. Place asbestos roofing material in properly labeled 6-mil polyethylene lined containers or dumpsters and add enough amended water to so that water is visible inside of bags.

- C. Slowly lower asbestos containing bags containing the asbestos roofing down to the ground by a rope, chute or by carrying them down a ladder. Never throw or drop bags from the roof.
- D. Containers (6-mil polyethylene bags or drums) shall be sealed when full. Wet material can be exceedingly heavy. Double bagging of waste material is required. Bags shall not be overfilled. They should be securely sealed to prevent accidental opening and leakage by tying tops of bags in an overhand knot or by taping in gooseneck fashion. Do not seal bags with wire or cord.
- E. Large components removed intact maybe wrapped in two (2) layers of 6-mil polyethylene sheeting secured with tape for transport to the landfill.
- F. Asbestos containing waste with sharp-edged components (e.g. nails, screws, metal lathe, tin sheeting) which would tear the polyethylene bags and sheeting shall be placed into drums for disposal.
- G. Inform the roofing contractor when finish so that the roofing contractor can install replacement material in the expose areas to prevent rain from entering the building.
- 1.7 Disposal Procedures
 - A. As the work progresses, to prevent exceeding available storage capacity onsite, sealed and labeled containers of asbestos containing waste shall be removed and transported to the prearranged disposal location.
 - B. Disposal must occur at an authorized site in accordance with regulatory requirements of NESHAP and applicable State and Local guidelines and regulations.
 - C. All dump receipts, trip tickets, transportation manifests or other documentation of disposal shall be delivered to the Building Owner for his records. A recommended record keeping format utilizes a chain-of- custody form which includes the names and addresses of the Generator (Building Owner), AAC, pickup site, and disposal site, the estimated quantity of the asbestos waste and the type of containers used. The form should be signed by the Generator, the AAC, and the Disposal Site Operator, as the responsibility for the material changes hands. If a separate hauler is employed, his name, address, telephone number and signature should also appear on the form.
 - D. Transportation to the landfill

- 1. Once drums, bags and wrapped components have been removed from the work area, they shall be loaded into an enclosed truck for transportation.
- 2. When moving containers, utilize hand trucks, carts and proper lifting techniques to avoid back injuries. Trucks with lift gates are helpful for raising drums during truck loading.
- 3. The enclosed cargo area of the truck shall be free of debris and lined with TWO (2) LAYERS OF 6-mil polyethylene sheeting to prevent contamination from leaking or spilled containers. Floor sheeting shall be installed first and extend up the side walls a minimum of TWENTY-FOUR (24) inches. Wall sheeting shall be overlapped and securely taped into place.
- 4. Drums or bags 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. Do not throw containers into truck cargo area.
- 5. 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.
- 6. 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 as appropriate.
- 7. Large metal dumpsters are sometimes used for asbestos waste disposal. These should have doors or tops that can be closed and locked to prevent vandalism or other disturbance to the bagged asbestos debris and wind dispersion of asbestos fibers. Unbagged material shall not be placed in these containers. These containers shall not be used for non-asbestos waste. Bags shall be placed, not thrown, into these containers to avoid splitting.
- E. Disposal at the landfill
 - 1. Upon reaching the landfill, trucks are to approach the dump location as closely as possible for unloading of the asbestos containing waste.
 - 2. Bags, drums and components shall be inspected as they are off-loaded at the disposal site. Material in damaged containers shall be repacked in empty drums or bags as necessary. (Local

requirements may not allow the disposal of asbestos waste in drums. Check with appropriate agency and institute appropriate alternative procedures.)

- 3. Waste containers shall be <u>placed</u> on the ground at the disposal site, not pushed or thrown out of trucks (weight of wet material could rupture containers.)
- 4. Personnel off-loading containers at the disposal site shall wear protective equipment consisting of disposable 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 methods to meet the no visible residue criteria. Polyethylene sheeting shall be removed and discarded along with contaminated cleaning materials and protective clothing, in bags or drums at the disposal site.
- 6. If landfill personnel have not been provided with personal protective equipment for the compaction operation by the landfill operator, AAC shall supply protective clothing and respiratory protection for the duration of this operation.

1.8 Personnel Management

- A. The AAC shall exercise complete control over all actions of his employees while on the project site or while off site from the start of work to completion of the entire project.
 - 1. The AAC shall warn his employees that unauthorized removal from the site of **any** property owned or controlled by the owner shall result in immediate prosecution by the owner or his authorized representative.
 - 2. The AAC will control employee actions and behavior to ensure that there is no unprofessional interaction with the owner's employees or occupants during the entire project.
 - 3. The AAC must control all his operations and employees to assure that they are limited to the space parameters allowed by the Owner. Employees, equipment, vehicles and supplies are restricted to areas designated by the Owner for the duration of the project.

1.9 AIR SAMPLING

A. The Asbestos Abatement Contractor shall conduct personnel air sampling in accordance to OSHA regulations. This OSHA sampling is to be conducted every day that asbestos abatement work is conducted on this project.

END OF SECTION

