APPENDIX

Stephenson School Building

Rehabilitation & Addition

Dripping Springs, Texas

Geotechnical Solutions

2922 NW Loop 410, Ste. 105
San Antonio, Texas 78230 • 210. 209. 4472 : geotechsltns@gmail.com
Firm No. F-19672

Mr. Larry Irsik, AIA **July 24, 2023**
Architexas |Create+Conserve **No.: 23-257 (Page 1 of 8)**
Lirsik@architexas.com

RE: Geotechnical Study (Proposed Addition to Stephenson School Bldg.)
103 Old Fitzhugh Road
Dripping Springs, Texas 78620

Sir:

Pursuant to your request, a representative of Geotechnical Solutions traveled to the above referenced location on July 19, 2023, to obtain soil samples **(by means of 2 borings,)** for the purposes of determining the Atterberg Limits (PI), soil classification/s, allowable bearing capacities, potential soil vertical movement estimations, and to provide foundation design parameters for a proposed building, which will have a slab surface of at least 1000 square feet. **Pavement design parameters** were also provided. The laboratory test results and our findings are summarized herein. **Representative Site Photos are attached.**

Typical Stratigraphy & Atterberg Limits (PI)

Depth / Interval	*Soil Classification*	*Symbol*	LL, %	PL, %	PI
½"	**7"** Light brown, Clayey-Silt, with gravel, stone fragments & cobbles		35	12	**23**
	Tan, Cobbly/Stony-soil stratum;		26	9	**17**
2.7'	**overlying** weathered stone / limestone stratum, semi-moist, dense to very dense		--	--	--
5.5'	***(Boring B-1)***				
½"	**13"** Light brown, Clayey-Silt, with gravel, stone fragments & cobbles		41	14	**27**
	Tan, Cobbly/Stony-soil stratum;		22	8	**14**
2.7'	**overlying** weathered stone/limestone stratum, semi-moist, desne to very dense		--	--	--
5.5'	***(Boring B-2)***				

Overall Effective PI: 15 - 17 ; PVR/PVM: -1-1/2" to +1-1/4" (at soil surface)
Allowable q_a: 1700 psf at minimum depth of 10" below existing elevation

Reinforced Beam-and-Slab-on-Grade Foundation

A slab-on-grade foundation may be considered for the proposed building. Geotechnical and pertinent PTI design parameters, based on general design analysis methods in Chapters 3 and 4 PTI - 2004 Edition, along with the 2008 Supplement, were evaluated and are summarized in the following table. **BRAB-WRI** parameters are also provided.

(OPTION 1 – Select Fill Method)

CRITERIA BASED ON PVR/PVM OF APPROX.: -3/4" to +3/4"

(Design PI: 25)

Thornthwaite Moisture Index	**-15 to -14**
Allowable Bearing Capacity	**3500 psf**
BRAB-WRI: C_w & Climatic Rating Factor:	**0.88 ; 0.12**
Edge Moisture Variation Distance (Em)	**5.9' (c)**
	2.8' (e)
Differential Vertical Soil Movement (Ym)	**0.95" (c)**
	1.25" (e)
Site Slope Correction Coefficient, C_s	**Slope to Grade**
Minimum Perimeter Grade Beam Penetration into Compacted Granular, Select Fill:	**12 in.**
Minimum (") Existing Soil to Remove and Replace with Granular, Select Fill:	**1-1/4 ft.**

The above design parameters assume that the granular Select Fill has a PI range of (7 – 22); and that the subgrade soil will be scarified to a depth of 6 inches and moistened within optimal soil-moisture range, prior to densely compacting; and that the moist-condition granular select fill will be introduced in loose lifts (not thicker than 9") prior to compacting. Compaction Method ASTM D698 is recommended to verify in-place density of subgrade clay-soil and compacted select fill.

OPTION 2: AS IS (Beam-and-Slab-on Grade)

CRITERIA BASED ON PVR/PVM OF APPROX.: *-1.5" to +1.5"*

(Design PI: 27)

Thornthwaite Moisture Index	**-15 to -14**
Allowable Bearing Capacity	**2300 psf**
Edge Moisture Variation Distance (Em)	**6.6' (center)**
	3.5' (edge)
Differential Vertical Soil Movement (Ym)	**1.36" (center)**
	1.76" (edge)
BRAB-WRI: C_w and Climatic Rating Factor:	**0.87 ; 0.13**
Minimum Perimeter Grade Beam Penetration into the existing Gravelly/Stony Soil, After Achieving Subgrade Elevation:	**16 in.**

The above design parameters assume that vertical moisture barrier (perimeter beam) is designed to extend to the recommended embedment depth and that **subgrade soil / fill soil** and excavated grade beam trenches are free of roots and loose soil and should be in a **moist and dense / well-compacted condition**, prior to concrete discharge. **Voids created by the removal of trees, boulders or previously existing flatwork/structures,** should be **backfilled** with moistened, low PI, sandy/gravelly soil and densely compacted.

The PTI method of predicting soil movement is mostly applicable when site moisture conditions are controlled by climatic conditions. Of course, foundation performance can be significantly influenced by adding perimeter pavement/s, yard drainage and yard maintenance, flower beds adjacent to foundation, rain gutters, utility line leaks, trees before and after construction, post construction subsurface or surface alterations near the foundation perimeter; and exceptional dry/wet prolonged conditions. The above criterion also assumes that proper irrigation methods and drainage **will be maintained after construction.** ***If proper drainage / irrigation is not maintained, potential vertical movements greater than that anticipated may occur.***

The use of **sacked fill** between the beams should be at the discretion of the structural engineer. In this case, the structural engineer should provide anticipated foundation performance information if sacked fill is incorporated in the overall foundation specifications/details.

Recommended Rigid Pavement Design

The pavement design analysis was generally based on the design procedures developed by *ACI Manual of Concrete Practice*.

Traffic Type	Concrete (JRCP)	Compacted Flexible Base Course (in.)	Moist, Firm Subgrade Soil
Light Duty	***5" (min. 3500 psi)***	***8"***	***6"***
Heavy Duty Traffic	***6" to 7" (min. 3500 psi)***	***10"***	***6"***

Compacted Gravel Road Specifications:

Prepared Subgrade: ***8"*** *(Scarified, Moistened & Recompacted)*

Compacted Base Course: ***8"*** *(Moistened & Compacted*)*

**Moistened & Compacted per ASTM D698 Compaction Test Method)*

Flexible Pavement Design Recommendations

The (flexible, HMAC) pavement design analysis was generally based on the design procedures developed by *AASHTO Guide of Pavement Structures*.

Summary of Estimated Serviceability over a 20 year period:

- Moderate Traffic: ***100,000 (18-kip) ESALs***
- Dumpster Pad / Heavy Duty Traffic: ***2,000,000 (18-kip) ESALs***

ASPHALT PAVEMENT PARAMETERS

Traffic Type	Type "D" Hot-Mix (in.)	Compacted Flexible Base Course (in.)	Moist, Firm Subgrade Soil
Light Duty	***1-3/4 – 2-1/4***	***6" (2 lifts)***	***6"***
Heavy Duty Traffic	***3"***	***10" (2 lifts)***	***6"***

- Organics, soft or excessively wet soils or unsuitable soils encountered should be removed prior to proofrolling activities. The proofrolling process is typically implemented in order to identify localized soft-soil areas and should be performed with construction equipment weighing at least **12 tons**. Voids created by the removal of trees should be backfilled with moist, A-1 or A-2 crushed limestone or gravelly soil which has a PI range of **8 to 22,** and then densely compacted in place.

- Moisture content of Subgrade should be maintained between -1 to +3 percent of optimum moisture content, and compacted to at least 95 percent of the maximum dry density as determined by Proctor method ASTM D-698. A slightly moist condition should be maintained prior to installation and compaction of moistened flexible base course material.

- Flexible base material should meet the grading and **PI** requirements as illustrated in TxDot Item 247: *Type A, Grade 1 or 2*.

- A **prime coat** should be applied on the finished base course section; and Type "D" section degree of compaction should be between **92 and 96 percent** of Max. Theoretical Density.

- The flexible base course section should extend horizontally at least **12 inches** beyond the outside edge of the proposed curbline.

- **Flexible Base Course** section should be compacted to a minimum of 97 percent of the maximum dry density as determined by proctor method TEX-113-E, with in-place moisture content maintained between -1 to +2 percent of the proctor optimum moisture value.

- A minimum of **one (1)** in-place density test per 5000 square feet should be performed.

- **Final pavement surface grades** should be established by the project civil engineer.

Common Causes of Premature Asphalt Pavement Failure

1) Absence of deepened curbs and/or moisture barriers which can lead to water entering the permeable base materials, saturating the base and underlying subgrade soils;
2) Soft/wet subgrade conditions;
3) Inadequately compacted base course / inadequately compacted subgrade soil;
4) Subgrade that is not well drained and not of uniform bearing capacity;
5) Not utilizing Proof rolling techniques to help identify soft spots or areas of unstable soils;
6) A finished pavement that does not provide a uniform, well-draining surface;
7) Failure to allow proper curing time of newly placed asphalt pavement prior to traffic loads;
8) Inadequate asphalt pavement thickness;
9) Failure to provide positive drainage at perimeter edge of pavement which can lead to negative drainage under the pavement; and
10) Repetitive load magnitudes that exceeds design traffic loads.

The asphalt design criteria illustrated above along with a properly prepared stabilized subgrade and base course section should adequately handle anticipated traffic loads; however, the pavement thickness cannot always counter the detrimental shrink-swell effects of the underlying expansive soils or the effects of future excessive traffic loads. Successful long-term performance may depend in part on the implementation of **good construction practices, proper subgrade/base preparation, and good surface drainage.**

GENERAL SUPPLEMENT INFORMATION FOR PROPOSED STRUCTURE

Grading & Drainage Considerations

Positive drainage during and after foundation construction, is particularly important to the long-term performance of the proposed structure. We suggest the following information be considered for perimeter drainage:

- The building pad/s should be elevated above grade to prevent surface water from entering the structure. Where possible extend paved surfaces up to the building line to serve as a barrier to water infiltration and evaporation. These surfaces should slope away from the building.
- Provide proper grading and drainage around foundations to prevent ponding and to facilitate the surface runoff away from foundation edges to minimize water infiltration to the soils below the foundation.
- Outlets for gutter systems should discharge water onto surfaces which quickly direct the water away from the perimeter of the buildings.
- Final grades within 10 feet of the buildings should be adjusted to slope away, preferably at a minimum slope of 3 percent.
- Planters located adjacent to structures should be self-contained, and sprinkler mains should be located a minimum of 5 feet from the building edge.
- Planter boxes placed/installed adjacent to the building should be configured so that concentrations of water are not available to underlying clay soils.
- Large trees/shrubs should not be allowed closer to foundations than a horizontal distance equal to their height due to their significant moisture demand as they mature.

LIMITATIONS OF GEOTECHNICAL STUDY
Proposed Addition to Stephenson School Building
103 Old Fitzhugh Road
Dripping Springs, Texas 78620

The analysis and recommendations contained in this report were based on the data from two (2) test borings, the laboratory test results, the observations associated with this site and our experience in the area. This report may not reflect precise variations of the soil conditions across the site. If different subsurface conditions are encountered at the time of construction/excavations, we should be contacted to evaluate the conditions encountered.

This report was prepared for this project exclusively for the use of *Architexas | Create+Conserve and their design team, and the builder / foundation contractor.*

Thank you for the opportunity to be of service
Geotechnical Solutions (F-19672)

Alan J. Vasquez
Geotechnical Consultant

Conan C. Bear, P.E.
Engineering Consultant

7/ 24/ 23

Representative Site Photos

103 Old Fitzhugh Road

Location of Proposed Addition

LIMITED LEAD BASED PAINT INSPECTION REPORT

Stephenson Building
101 Old Fitzhugh Road
Dripping Springs, Texas 78620

Project #23-1730

Prepared for:

Michelle Fischer
City Administrator
City of Dripping Springs
511 Mercer Street
Dripping Springs, Texas 78620

October 11, 2023

Champion Environmental Consulting, Inc.
109 W 7th St. Suite 210 Georgetown Texas 78626 *main* (512) 992-5383

LIMITED LEAD INSPECTION REPORT

Stephenson Building
101 Old Fitzhugh Road
Dripping Springs, Texas 78620

Prepared by:

Cole Allen
Lead Inspector / Risk Assessor
Certificate No. 2071247

TABLE OF CONTENTS

EXECUTIVE SUMMARY[1]

Champion Environmental Consulting, Inc. (CECI) was retained by **City of Dripping Springs** (hereinafter the Client) to conduct a lead-based paint inspection of the **Stephenson Building, 101 Old Fitzhugh Road, Dripping Springs, Texas** (hereinafter the Site). CECI's approach to this assessment was to inspect the designated areas of the Site, for lead-based paint (LBP) by physically accessing the painted substrates throughout the selected areas of the Site and to verify the uniformity (homogeneity) of the paints used in the construction of the Site.

During the sampling event a total of **50 assay points**, including calibration and standardizing samples, of suspect paints from areas throughout the interior of the Site were analyzed for determination of lead content. An x-ray fluorescence (XRF) analyzer was utilized for LBP detection for this project. All operators of the XRF analyzer are certified for proper use by CECI.

LBP is defined as any homogeneous paint that detects lead content at 1.0 milligrams per square centimeter (mg/cm^2) or greater by the XRF Analyzer. ***LBP was identified in the following painted substrates analyzed at the Site:***

Room/Location	Substrate	Location
Exterior	Shiplap Ceiling White Wood	East Side Main Entrance
Exterior	Door Frames Brown Wood	East Side Main Entrance
Interior	Window Frames Multi Colors Wood	Room A, B, D, East Side Restroom and Room C West Wall
Interior	Front of Stage Green Wood	Room C

[1]This is a summary of the contents of this report. Please refer to the full text for a complete explanation and supporting information.

1.0 INTRODUCTION

Champion Environmental Consulting, Inc. (CECI) was retained by the Client to conduct a lead-based paint inspection of the Site. CECI's approach to this assessment was to inspect the designated areas of the Site, for lead-based paint (LBP) by physically accessing the painted substrates throughout the selected areas of the Site and to verify the uniformity (homogeneity) of the paints used in the construction of the Site.

CECI conducted its sampling program at the Site utilizing an X-Ray Fluorescence (XRF) Analyzer. LBP is identified as those paints that were analyzed to have lead content at ***1.0 milligram per square centimeter (mg/cm^2)*** or greater.

1.1 Standard of Care and Limitations

This report was prepared for the exclusive use of the Client named herein to aid in the identification and management of LBP at the Site. CECI performed its services in a manner consistent with the level of care and expertise exercised by environmental professionals performing the same or similar services at the same time and in the same geographic area.

Samples for this LBP sampling program were collected from discrete sample locations associated with the areas specifically identified herein (i.e., Target Areas). While attempts were made to obtain representative samples most likely to contain LBP, findings and conclusions herein are necessarily limited by the number of samples taken and access provided for sampling activities. Conclusions and recommendations herein represent the professional opinions of the CECI personnel involved with the project. CECI assumes no responsibility or liability for errors in information or data provided by third party sources.

2.0 BUILDING SURVEY

2.1 General

The LBP sampling inspection was of the designated substrates of the site for the identification of homogeneous areas accessible at the time of the site visits. Copies of CECI's certifications and licenses are in Appendix A of this report.

2.2 Lead-Based Paint Analysis

The LBP sampling and analysis involved the physical inspection of the Site, a sampling program for suspect LBP, and field analysis utilizing a Viken Pb200i XRF Analyzer to determine the lead content of each painted surface. Locations of components tested are designated as room locations (e.g., Room Numbers) and location within each room (e.g., North [N], East [E], South [S], West [W]). CECI identified substrates with homogeneous areas of suspect LBP that, based on historical uses, have the potential of containing lead. ***LBP was identified in the following painted substrates analyzed at the Site:***

Room/Location	Substrate	Location
Exterior	Shiplap Ceiling White Wood	East Side Main Entrance
Exterior	Door Frames Brown Wood	East Side Main Entrance
Interior	Window Frames Multi Colors Wood	Room A, B, D, East Side Restroom and Room C West Wall
Interior	Front of Stage Green Wood	Room C

All paints that contain any level of lead are regulated by the OSHA Lead in Construction Standard 29CFR 1926.62. Construction work covered by this standard includes demolition or salvage of structures where lead-containing materials are present; removal or encapsulation of lead-containing materials; renovation of structures, substrates, or portions thereof that have lead-containing materials; installation of materials containing lead; lead contamination cleanup; transportation, storage, and disposal of lead-containing materials; and maintenance operations associated with these construction activities.

In performing these activities, OSHA requires an initial determination that the construction activities used at the job site do not create airborne emissions of lead above the Action Level of 30 $\mu g/m^3$ (i.e., negative exposure assessment). This exposure assessment may include initial exposure monitoring, historical data that meet certain requirements, or objective data demonstrating that a product or material containing lead, or a specific process cannot result in employee exposures to lead above the Action Level.

During the exposure assessment, the workers must be protected in the assumption that the work process is going to create airborne concentrations above the Permissible Exposure Level (PEL)

of 50 $\mu g/m^3$. This requires medical monitoring (blood test) for blood lead levels, personal protective equipment (PPE), respiratory protection, a Hazard Communication Program, and a written Compliance Program. If a negative initial determination is achieved during a certain work process, no further monitoring is required. Additional exposure assessment and monitoring is required with any change in process, equipment, controls, or environmental conditions. Employers subject to these work conditions should refer to the OSHA Lead Standard for complete compliance.

APPENDIX A
ACCREDITATION

Department of State Health Services certifies that

COLE H ALLEN

is certified as a

Lead Risk Assessor

Certification No: 2071247

Control No: 8102

Expires: 4/27/2025

Jennifer A. Shuford M.D., M.P.H
Commissioner of Health

Texas Department of State Health Services

BE IT KNOWN THAT

COLE H ALLEN

is certified to perform as a

Lead Risk Assessor

in the State of Texas and is hereby governed by the rights, privileges and responsibilities set forth in Texas Occupations Code, Chapter 1955 and Title 25, Texas Administrative Code, Chapter 295 relating to Texas Environmental Lead Reduction, as long as this license is not suspended or revoked.

Certification Number: 2071247

Expiration Date: 04/27/2025

Jennifer Shuford, MD, MPH, Commissioner of Health

Control Number: 8102

(Void After Expiration Date)

VOID IF ALTERED NON-TRANSFERABLE

SEE BACK

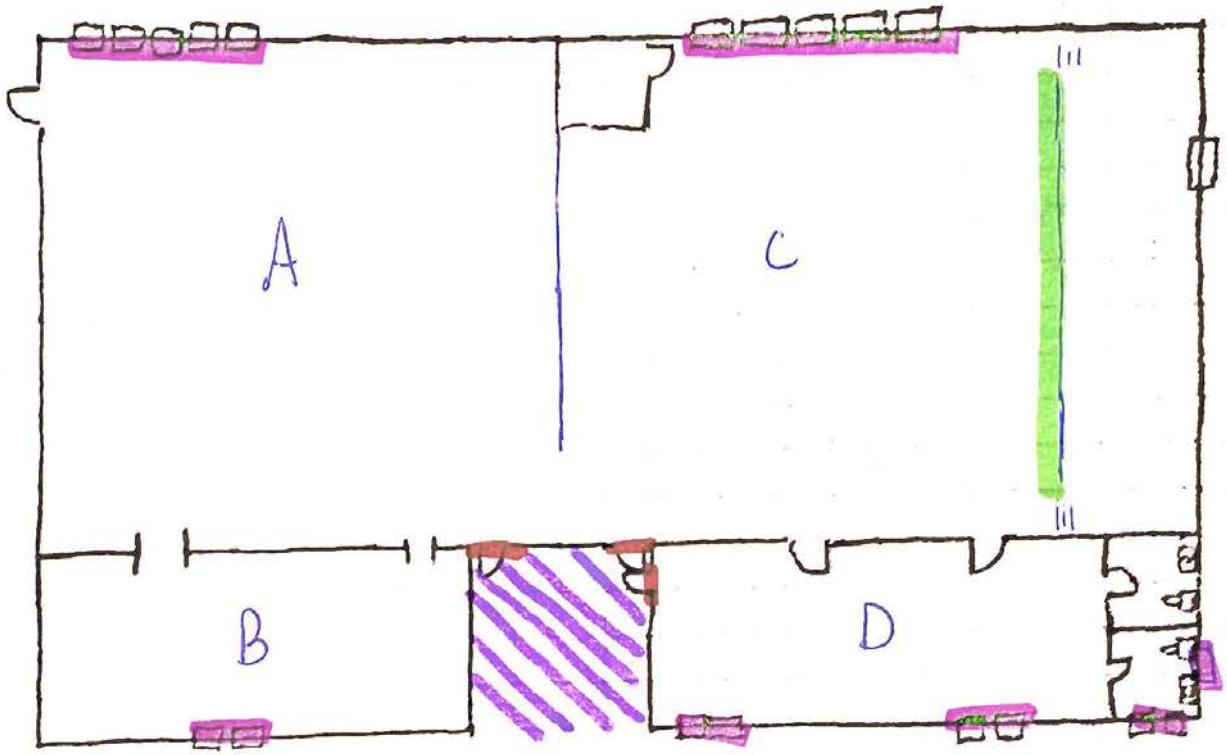
APPENDIX B
ANALYTICAL RESULTS

Lead-Based Paint XRF Survey
Stephenson Building
Inspection Date(s) October 4, 2023
Project # 23-1730

Reading #	Con.	Result	Room	Structure	Substrate	Location	Color
1	1.1	Positive	CALIBRATE				
2	1	Positive	CALIBRATE				
3	1	Positive	CALIBRATE				
4	0	Negative	Entry to A	Door	Wood	West	White
5	**4.1**	**Positive**	**Entry to A**	**Door Frame**	**Wood**	**South**	**Brown**
6	0.2	Negative	Room A	Wall	Plaster	West	White
7	0.2	Negative	Room A	Wall	Plaster	East	Purple
8	0	Negative	Room A	Wall	Plaster	South	Green
9	0.2	Negative	Room A	Window Frame	Wood	Center	White
10	**3**	**Positive**	**Room A**	**Window Frame**	**Wood**	**East**	**White**
11	**1.5**	**Positive**	**Room A**	**Window Frame**	**Wood**	**East**	**White**
12	**3.1**	**Positive**	**Room A**	**Window Frame**	**Wood**	**East**	**Purple**
13	0.1	Negative	Room A	Floor	Wood	Center	Green
14	0.2	Negative	Room A	Floor	Wood	Center	Green
15	0	Negative	Room A	Door	Metal	North	White
16	0.5	Negative	Room A	Door Frame	Metal	West	Brown
17	**3.2**	**Positive**	**Room A**	**Sliding Door**	**Wood**	**South**	**Brown**
18	**3.1**	**Positive**	**Room A**	**Sliding Door**	**Wood**	**South**	**Brown**
19	**6.5**	**Positive**	**Room A**	**Sliding Door Frame**	**Wood**	**South**	**Brown**
20	0.2	Negative	Room B	Wall	Plaster	West	White
21	0	Negative	Room B	Wall	Dry Wall	East	White
22	0	Negative	Room B	Wall	Plaster	East	Green
23	0.2	Negative	Room B	Window Frame	Wood	West	White
24	**2.3**	**Positive**	**Room B**	**Window Frame**	**Wood**	**West**	**White**
25	0.1	Negative	Entry to C	Door	Wood	West	White
26	**5**	**Positive**	**Entry to C**	**Door Frame**	**Wood**	**North**	**White**
27	**2.2**	**Positive**	**Room C**	**Sliding Door**	**Wood**	**North**	**Red**
28	0	Negative	Room C	Wall	Plaster	East	White
29	0	Negative	Room C	Wall	Plaster	West	White
30	0	Negative	Room C	Wall	Plaster	South	Green
31	**3.8**	**Positive**	**Room C**	**Stage**	**Wood**	**South**	**Green**
32	0	Negative	Room C	Stage Floor	Wood	Center	Green
33	0.3	Negative	Room C	Stage Stairs	Wood	Center	Green
34	**1.8**	**Positive**	**Room C**	**Window Frame**	**Wood**	**East**	**White**
35	0.1	Negative	Room D	Door	Wood	South	Natural
36	0.1	Negative	Room D	Door Frame	Metal	North	Brown
37	0	Negative	Room D	Wall	Dry Wall	East	White
38	**3**	**Positive**	**Room D**	**Window Frame**	**Wood**	**West**	**White**
39	0	Negative	Room D	Wall	Plaster	East	White
40	**1.2**	**Positive**	**Exterior Front Entry**	**Ceiling**	**Wood**	**Center**	**White**
41	**1.5**	**Positive**	**Exterior Front Entry**	**Ceiling**	**Wood**	**Center**	**White**
42	**1.7**	**Positive**	**Exterior Front Entry**	**Ceiling**	**Wood**	**Center**	**White**
43	0.6	Negative	Exterior	Soffit	Wood	Center	Maroon
44	0.5	Negative	Exterior	Soffit	Wood	Center	Maroon
45	**4.4**	**Positive**	**Exterior Entry to D**	**Door Frame**	**Wood**	**South**	**Brown**
46	0	Negative	Exterior	Window Frame	Wood	East	Brown
47	0.1	Negative	Exterior	Window Frame	Wood	East	Brown
48	1.1	Positive	CALIBRATE				
49	1.1	Positive	CALIBRATE				
50	1.1	Positive	CALIBRATE				

APPENDIX C
REFERENCE DRAWING(S)

Stephenson Building 23-1730
101 Old Fitzhugh Rd, Dripping Springs
Lead Location Plans



Front of Stage Wood
Green paint ~ 70 SF

Exterior Door Frames Wood
~ 3 Brown Door Frames

Window Frames Interior Multi Colors
Wood
~ 29 windows

Exterior Shiplap Ceiling Wood
White
~ 120 SF

October 11, 2023

Michelle Fischer
City Administrator
City of Dripping Springs
511 Mercer Street
Dripping Springs, Texas 78620

RE: Limited Asbestos Survey of Target Areas at the Site Related to Proposed Demolition/Renovation
Stephenson Building
101 Old Fitzhugh Road, Dripping Springs, Texas 78620
Project #23-1730

Dear Ms. Fischer:

Champion Environmental Consulting Inc. (Champion Environmental) was retained by **City of Dripping Springs** (Hereinafter, the Client) to conduct a limited asbestos survey at the Site within the following Target Areas as identified by the Client.

Stephenson Building – Dripping Springs, TX

The attached report summarizes these services in accordance with our discussion. **Regulated amounts of asbestos were detected in the following materials and in the approximate quantities**

Sample #(s)	Location	Material	Result – Asbestos %	APPROXIMATE Quantity
19-21	All Exterior Windows except the one on the North Side Northwest corner	Window Glazing	2% Chrysotile	29 Windows

The laboratory analytical results are attached in Appendix A of this report. Licenses are attached in Appendix B of this report. The Sample Location Drawing is attached in Appendix C of this report. If you have any questions on this report or any other matter, please do not hesitate to call me at (512) 992-5383.

Sincerely,

Champion Environmental Consulting, Inc.

Wade Champion
Individual Asbestos Consultant
DSHS License No. 10-5410
Expiration Date 8/25/25

1.0 Services

Table I Services Summary	
Client	City of Dripping Springs 511 Mercer Street Dripping Springs, Texas 78620
Site Address	101 Old Fitzhugh Road, Dripping Springs, Texas 78620
Target Areas identified by Client	Stephenson Building – Dripping Springs, TX
Scope of Work 1. Conduct a preliminary visual reconnaissance of the renovation /demolition Target Areas identified by the client to visually determine the presence of suspect ACM 2. In the event suspect ACM is identified, visually assess suspect ACM for variations in color, texture, thickness, and other characteristics useful in determining the material's uniformity and homogenous area 3. In the event suspect ACM is identified, evaluate current physical condition, friability and potential for damage, assign hazard ratings and estimate quantities 4. Collect samples of identified and reasonably accessible suspect ACM within Target Areas 5. Send suspect ACM samples to laboratory for analysis of asbestos content, if any 6. Prepare report summarizing results	
Sample Date(s)	October 4, 2022
Inspector(s) DSHS License #	Cole Allen 603654
Samples Collected:	A total of 24 samples of suspect asbestos-containing materials were collected, as agreed with the Client, within reasonably accessible portions of the Target Areas
Analytical Lab:	CA Labs, LLC asbestos laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) through the National Institute for Standards and Technology (ID Code No 200772-0) and licensed as a DSHS licensed asbestos bulk laboratory (License No. 30-0370)
No. of Samples Analyzed	24
Analyzed Date:	October 6, 2022
Report Number:	CBR23107716
Analytical Method:	Polarized Light Microscopy (PLM) using the Environmental Protection Agency (EPA) "Interim Method for Determination of Asbestos in Bulk Insulation Samples" [40 CFR Chapter 1 (1-1-87 Edition) Part 763, Subpart F, Attachment III]
General Information about Suspect ACM Asbestos has historically been a component of a wide variety of building materials. These types of building materials, which may potentially contain asbestos, are termed suspect asbestos-containing materials" or suspect ACM). Suspect ACM may or may not contain asbestos. The actual asbestos content of a suspect material can be determined only through proper sampling and analysis performed by a qualified building inspector and laboratory. Pursuant to the National Emission Standards for Hazardous Air Pollutants (NESHAP) asbestos regulations (40 CFR§61:141, et seq) ACM can be classified into two categories; friable ACM which can be reduced to powder or crumbled under light hand pressure (e.g. ceiling textures and thermal system insulation) and non-friable ACM, which are materials that cannot be easily crumbled (e.g. floor tile and floor tile mastic). Regulated asbestos containing materials (RACM) which are those materials containing over 1% asbestos as defined under asbestos NESHAP.	

2.0 Standard of Care and Limitations:

This report was prepared for the exclusive use of the Client named herein to aid in the identification and management of ACM and RACM in the renovation/demolition Target Areas identified by the Client. Champion Environmental performed its service in a manner consistent with the level of care and expertise exercised by asbestos professional performing the same or similar services at the same time and in the same geographic area.

Samples for this asbestos survey were collected from discrete sample location within the rooms and areas specifically identified herein (i.e., Target Areas). While attempts were made to obtain representative samples most likely to contain asbestos, finding and conclusions herein are necessarily limited by the number of samples taken and access provided for sampling activities. *The results herein cannot guarantee that no asbestos is present in any area not sampled*. This asbestos survey *was not intended to be a comprehensive asbestos inspection of the site*, nor was it intended to be used for evaluation of worker health and safety conditions. To determine whether regulated ACM is present at other locations not sampled herein, *a comprehensive asbestos inspection of the site* would be necessary.

Conclusions and recommendations herein represent the professional opinions of the Champion Environmental Consulting personnel involved with the project. The results of this report should not be considered as legal interpretation of existing federal, state or local environmental, health and safety laws or regulations. Champion Environmental Consulting, Inc., assumes no responsibility or liability for errors in information or data provided by third party sources.

3.0 Report Use and Reliance:

This report represents Champion Environmental's services as of the sampling date. As our final document, it may not be altered after final issuance. This study and report were prepared on behalf of and for the exclusive use of the Client solely its use and reliance in determining the presence of FACM in identified Target Areas of the site. The Client was the only party to which Champion Environmental explained the risks and was solely involved in shaping the scope of the services. Accordingly, reliance on this report by any other party may involve assumptions leading to an unintended interpretation of findings and opinions. With the consent of Champion Environmental and the Client, Champion Environmental may offer reliance to third parties or contract with other parties to develop findings and opinions related to such party's unique risk management concerns. Notwithstanding the foregoing, any and all third party reliance upon this Report shall be limited to the fair market value of services undertaken to perform this Report as of the report date.

4.0 Methodologies:

4.1 Sampling

This limited inspection was guided by the Texas Asbestos Health Protection Rules (TAHPR) (see 25 TAC §296) and generally in accord with AHERA (the Asbestos Hazard Emergency Response Act of 1986, Public law 99-519) sampling protocols (see 40 CFR §§ 763.86 and 763.88). The AHERA sampling protocols are statistically-based and were originally developed to implement AHERA which amends the Federal Toxic Substances Control Act (see 15 USC, §2641, et seq). These rules are often followed by the OSHA, and the Department of State Healthy Services (DSHS). Champion Environmental generally followed these sampling protocols to in an effort to collect representative samples of the various suspect building materials in the Target Areas.

Suspect ACM samples were collected by physically removing a small portion (approximately one square inch) of the suspect material using a sharp instrument. All layers of the material samples were penetrated and registered as separate samples. Disturbance of adjacent material was minimized during the sampling activities. Each sample was place into a separate container and then sealed. Each sample was labeled with the sample number and collected location, and a chain-of-custody form was completed. The sampling instrument was cleaned between each sample collected to mitigate potential cross contamination between samples collected.

4.2 Analytical Procedures

If the results of the bulk laboratory analysis reveal asbestos, the percentage of asbestos contained within the sample is compared with the criteria outlined in the EPA definition of asbestos-containing material (and which value is also followed by OSHA and DSHS). If a concentration of greater than one percent (1%) asbestos is reported, it is defined by the Asbestos NESHAP as a positive identification and the material could be considered RACM depending upon the nature of the ACM and its coverage.

The Asbestos NESHAP states the RACM (as defined in 40 CFR §61.141) containing less than 10% asbestos should be verified by point counting. If bulk sampling analysis determines that asbestos content of a friable asbestos sample is less than 10%, the building owner may;(i) elect to assume the asbestos content to be greater than 1% and treat the material as RACM, or (ii) require verification of asbestos content by point counting. If a result obtained by point counting is different from a result obtained by visual estimation, the point count result is used.

5.0 Recommendations:

Based upon the forgoing results, **if applicable,** Champion Environmental Consulting, Inc. offers the recommendations presented below. Such recommendations should be implemented prior to the commencement of any renovation or demolition activities or any other activities that would potentially disturb the identified ACM or RACM at the site.

- Identified ACM. Including non-friable ACM *that will be disturbed by renovation or demolition activities* should be removed as soon as feasibly possible by appropriately licensed personnel and in accordance with applicable laws and regulations.

- Identified ACM which *will not be disturbed by renovation or demolition activities but which is damaged* should be repaired or encapsulated (by appropriately licensed personnel and in accordance with applicable laws and regulations) to prevent future damage.

- *ACM to remain* in place should be enclosed in airtight impermeable barrier or encapsulated to prevent damage.

- An *Asbestos Operation and Maintenance Program* should be implemented to manage existing ACM in place.

In the event renovation or demolition activities are slated for portions of the site outside of the Target Areas, an asbestos survey should be performed for those portions of the site –prior to the initiation of renovation or demolition activities.

APPENDIX A

Laboratory Results

Limited Asbestos Survey of Target Areas at the Site Related to Proposed Demolition/Renovation

Stephenson Building – Dripping Springs, TX

Project #23-1730

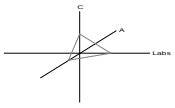
Laboratory Analytical Results Summary

Sample #(s)	Location	Material	Result – Asbestos %	APPROXIMATE Quantity
19-21	All Exterior Windows except the one on the North Side Northwest corner	Window Glazing	2% Chrysotile	29 Windows

Note: Refer to attached laboratory report for details

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

Champion Environmental
109 W 7th St, Suite 210
Georgetown, TX 78626

Attn: Wade Champion
Customer Project: Stephenson Building-Dripping Springs
Reference #: CBR23107776 Date: 10/6/2023

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

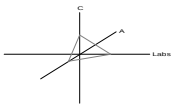
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Stephenson Building-Dripping Springs **CA Labs Project #:** CBR23107776

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
				White Sealant
19	***19-1***	***White Sealant***	***2% Chrysotile***	
20	***20-1***	***White Sealant***	***2% Chrysotile***	
21	***21-1***	***White Sealant***	***2% Chrysotile***	

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Wade Champion
Champion Environmental
109 W 7th St, Suite 210
Georgetown, TX 78626

Phone # 512-992-5383
Fax # 512-597-8787

Customer Project: Stephenson Building-Dripping Springs

Turnaround Time: 24 hr

CA Labs Project #: CBR23107776

Date: 10/6/2023
Samples Received: 10/6/2023
Date Of Sampling: 10/4/2023
Purchase Order #: 23-1730

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
1		***1-1***	***White Textured Surfacing***	***N***	***None Detected***		100% qu, mi, bi, ca
		1-2	***White Drywall with Paper***	***N***	***None Detected***	10% ce	90% qu, gy
2		***2-1***	***White Textured Surfacing***	***N***	***None Detected***		100% qu, mi, bi, ca
		2-2	***White Drywall with Paper***	***N***	***None Detected***	10% ce	90% qu, gy
3		***3-1***	***White Compound***	***Y***	***None Detected***		100% qu, mi, ca
		3-2	***White Drywall with Paper***	***N***	***None Detected***	10% ce	90% qu, gy
4		***4-1***	***White Textured Surfacing***	***N***	***None Detected***		100% qu, mi, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Wade Champion
Champion Environmental
109 W 7th St, Suite 210
Georgetown, TX 78626

Phone # 512-992-5383
Fax # 512-597-8787

Customer Project: Stephenson Building-Dripping Springs

Turnaround Time: 24 hr

CA Labs Project #: CBR23107776

Date: 10/6/2023
Samples Received: 10/6/2023
Date Of Sampling: 10/4/2023
Purchase Order #: 23-1730

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
5		***5-1***	***White Textured Surfacing***	***N***	***None Detected***		100% qu, mi, bi, ca
		5-2	***White Drywall with Paper***	***N***	***None Detected***	10% ce	90% qu, gy
6		***6-1***	***White Compound***	***Y***	***None Detected***		100% qu, mi, ca
7		***7-1***	***Tan Surfaced Gray Plaster***	***N***	***None Detected***		100% qu, ma, bi, ca
8		***8-1***	***Tan Surfaced Gray Plaster***	***N***	***None Detected***		100% qu, ma, bi, ca
9		***9-1***	***Tan Surfaced Gray Plaster***	***N***	***None Detected***		100% qu, ma, bi, ca
10		***10-1***	***White Sealant on Wrap***	***N***	***None Detected***	10% fg 40% ce	50% qu, ma, ot

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Wade Champion
Champion Environmental
109 W 7th St, Suite 210
Georgetown, TX 78626

Phone # 512-992-5383
Fax # 512-597-8787

Customer Project: Stephenson Building-Dripping Springs

Turnaround Time: 24 hr

CA Labs Project #: CBR23107776

Date: 10/6/2023
Samples Received: 10/6/2023
Date Of Sampling: 10/4/2023
Purchase Order #: 23-1730

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
11		***11-1***	***White Sealant on Wrap***	***N***	***None Detected***	10% fg 40% ce	50% qu, ma, ot
12		***12-1***	***White Sealant on Wrap***	***N***	***None Detected***	10% fg 40% ce	50% qu, ma, ot
13		***13-1***	***Black Cove Base***	***Y***	***None Detected***		100% qu, ma
		13-2	***Yellow and Brown Mastic***	***N***	***None Detected***		100% qu, bi
14		***14-1***	***Black Cove Base***	***Y***	***None Detected***		100% qu, ma
		14-2	***Yellow and Brown Mastic***	***N***	***None Detected***		100% qu, bi
15		***15-1***	***Black Cove Base***	***Y***	***None Detected***		100% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Wade Champion
Champion Environmental
109 W 7th St, Suite 210
Georgetown, TX 78626

Phone # 512-992-5383
Fax # 512-597-8787

Customer Project: Stephenson Building-Dripping Springs

Turnaround Time: 24 hr

CA Labs Project #: CBR23107776

Date: 10/6/2023
Samples Received: 10/6/2023
Date Of Sampling: 10/4/2023
Purchase Order #: 23-1730

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		15-2	***Yellow and Brown Mastic***	***N***	***None Detected***		100% qu, bi
16		***16-1***	***Yellow Mastic***	***Y***	***None Detected***		100% qu, bi
17		***17-1***	***Yellow Mastic***	***Y***	***None Detected***		100% qu, bi
18		***18-1***	***Yellow Mastic***	***Y***	***None Detected***		100% qu, bi
19		***19-1***	***White Sealant***	***Y***	***2% Chrysotile***		98% qu, ma, ca
20		***20-1***	***White Sealant***	***Y***	***2% Chrysotile***		98% qu, ma, ca
21		***21-1***	***White Sealant***	***Y***	***2% Chrysotile***		98% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Wade Champion
Champion Environmental
109 W 7th St, Suite 210
Georgetown, TX 78626

Phone # 512-992-5383
Fax # 512-597-8787

Customer Project: Stephenson Building-Dripping Springs

Turnaround Time: 24 hr

CA Labs Project #: CBR23107776

Date: 10/6/2023
Samples Received: 10/6/2023
Date Of Sampling: 10/4/2023
Purchase Order #: 23-1730

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
22		***22-1***	***Gray Mortar***	***Y***	***None Detected***		100% qu, ma, ca
23		***23-1***	***Gray Mortar***	***Y***	***None Detected***		100% qu, ma, ca
24		***24-1***	***Gray Mortar***	***Y***	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs

C.A. Labs, LLC.
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
Mobile: 225-993-3471

Chain of Custody

Client Name:	Champion Environmental Consulting	**CA Labs job #**	CBR23107776
Client Address:	109 W 7th St.	Billing Address: (if different)	Same
	Suite 210		
	Georgetown TX 78626		
phone number:	512 992 5383		
fax number:	N/A	Send Reports to:	wchampion@c-eci.com
Project Number:	23-1730	Project Name:	Stephenson Building - Dripping Springs
Contact:	Wade Champion	**Reports Results** VIA:	EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	Total # Samples to be Analyzed:	Material Matrix:
24	24	Air / (Bulk) / Water

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	(PLM)	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	**Allergen Particle:**	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	(24 hour)	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	**PCM:** NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	***8 hour***	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
1	WT/DW - Restrooms	10-4-23	
2	↓ ↓	↓	
3	↓ Room B	↓	
4	3C Restrooms	↓	
5	↓ ↓		

Custody Information:

Samples relinquished:	[signature] 10-4-23/1800	Samples received:	Carol Braner 9:40 10/6/23
	Signature / Date / Time		Signature / Date / Time
Samples relinquished:		Samples received:	
	Signature / Date / Time		Signature / Date / Time

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

Client Name: Champion Environmental Consulting

Client Address: 109 W 7th St. Suite 210
Georgetown TX 78626

phone number: 512 992 5383

fax number: N/A

Project Number: 23-1730

Contact: Wade Champion

CA Labs job # CBR 23107776

Billing Address: Same
(if different)

Send Reports to: wchampion@c-eci.com

Project Name: Stephenson Building - Dripping Springs

Reports Results
VIA: EMAIL X **FAX**____ **VERBAL**___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
6	JC - Room B	10-4-23	
7	Plaster Texture	↓	
8	↓	↓	
9	↓	↓	
10	Duct Mastic	↓	
11	↓	↓	
12	↓	↓	
13	CBM	↓	
14	↓	↓	
15	↓	↓	
16	Residual Mastic on Duct Frame	↓	
17	↓	↓	
18	↓	↓	
19	Window Glazing	↓	
20	↓	↓	
21	↓	↓	
22	Ext Stone Mortar	↓	
23	↓	↓	
24	↓	↓	
		↓	
		↓	
		↓	
		↓	

For internal use:
Any initial changes regarding project (indicate yes by checking line)_____

Custody Information:
Samples relinquished: 10-4-23 1500
Signature / Date / Time

Samples received: 9:40 10/6/23
Signature / Date / Time

Samples relinquished:
Signature / Date / Time

Samples received:
Signature / Date / Time

APPENDIX B

Licenses

Texas Department of State Health Services

CHAMPION ENVIRONMENTAL CONSULTING INC

is certified to pursuant as an

Asbestos Consultant Agency

in the State of Texas and is hereby governed by the rights, privileges and responsibilities set forth in Texas Occupations Code, Chapter 1954 and Title 12, Texas Administrative Code, Chapter 295 relating to Texas Asbestos Health Protection, as long as this license is not suspended or revoked.

License Number: 100522 *Expiration Date: 04/01/2025*

Control Number: 97564 *Jennifer Shuford, MD, MPH, Commissioner of Health* *(Void After Expiration Date)*

VOID IF ALTERED NON-TRANSFERABLE

SEE BACK

Texas Department of State Health Services

CA LABS LLC

is certified to pursuant as an

Asbestos Laboratory
PCM, PLM, TEM

in the State of Texas and is hereby governed by the rights, privileges and responsibilities set forth in Texas Occupations Code, Chapter 1954 and Title 12, Texas Administrative Code, Chapter 295 relating to Texas Asbestos Health Protection, as long as this license is not suspended or revoked.

License Number: 300370 *Expiration Date: 01/04/2025*

Control Number: 96685 *Jennifer Shuford, MD, MPH, Commissioner of Health* *(Void After Expiration Date)*

VOID IF ALTERED NON-TRANSFERABLE

SEE BACK

Texas Department of State Health Services

Asbestos Individual Consultant

WADE E CHAMPION
License No. 105410
Control No. 98246
Expiration Date: 25-Aug-2025

Texas Department of State Health Services

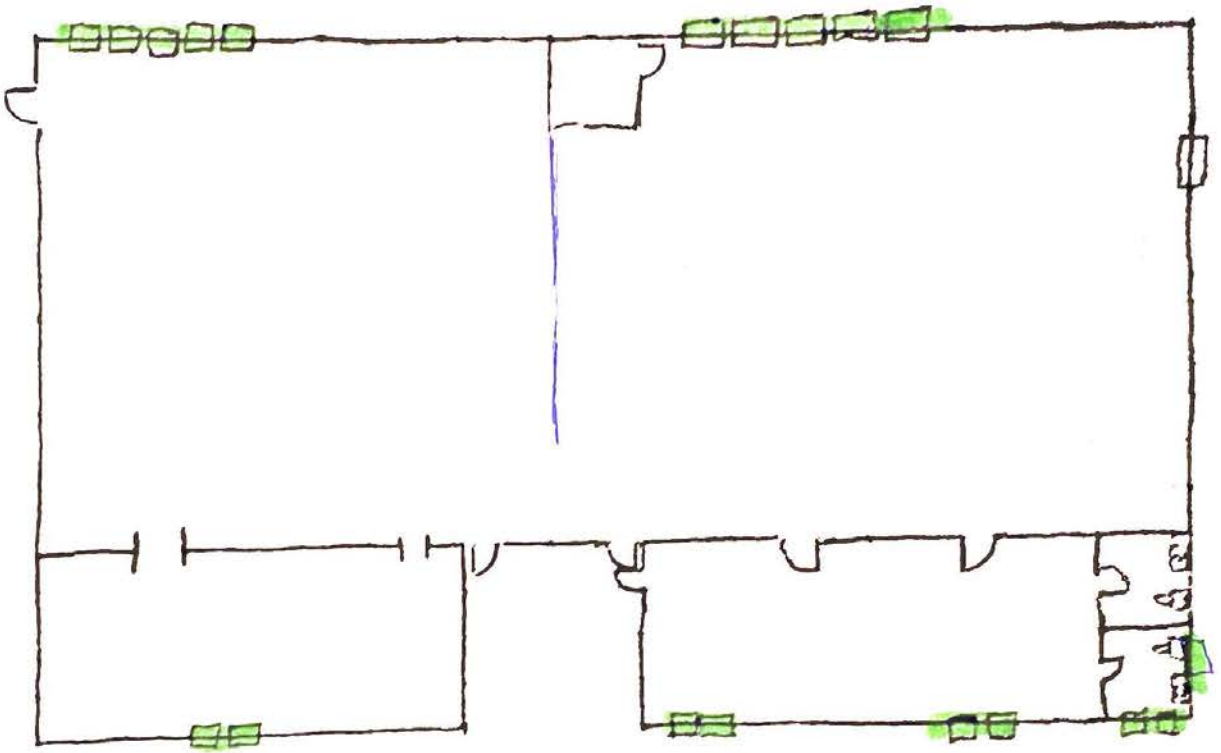
Asbestos Inspector

COLE H ALLEN
License No. 603654
Control No. 100198
Expiration Date: 10-Jan-2024

APPENDIX C

Sample Location Drawing(s)

Stephenson Building
101 old Fitzhugh Rd, Dripping Springs
Asbestos Location Plan 23-1730

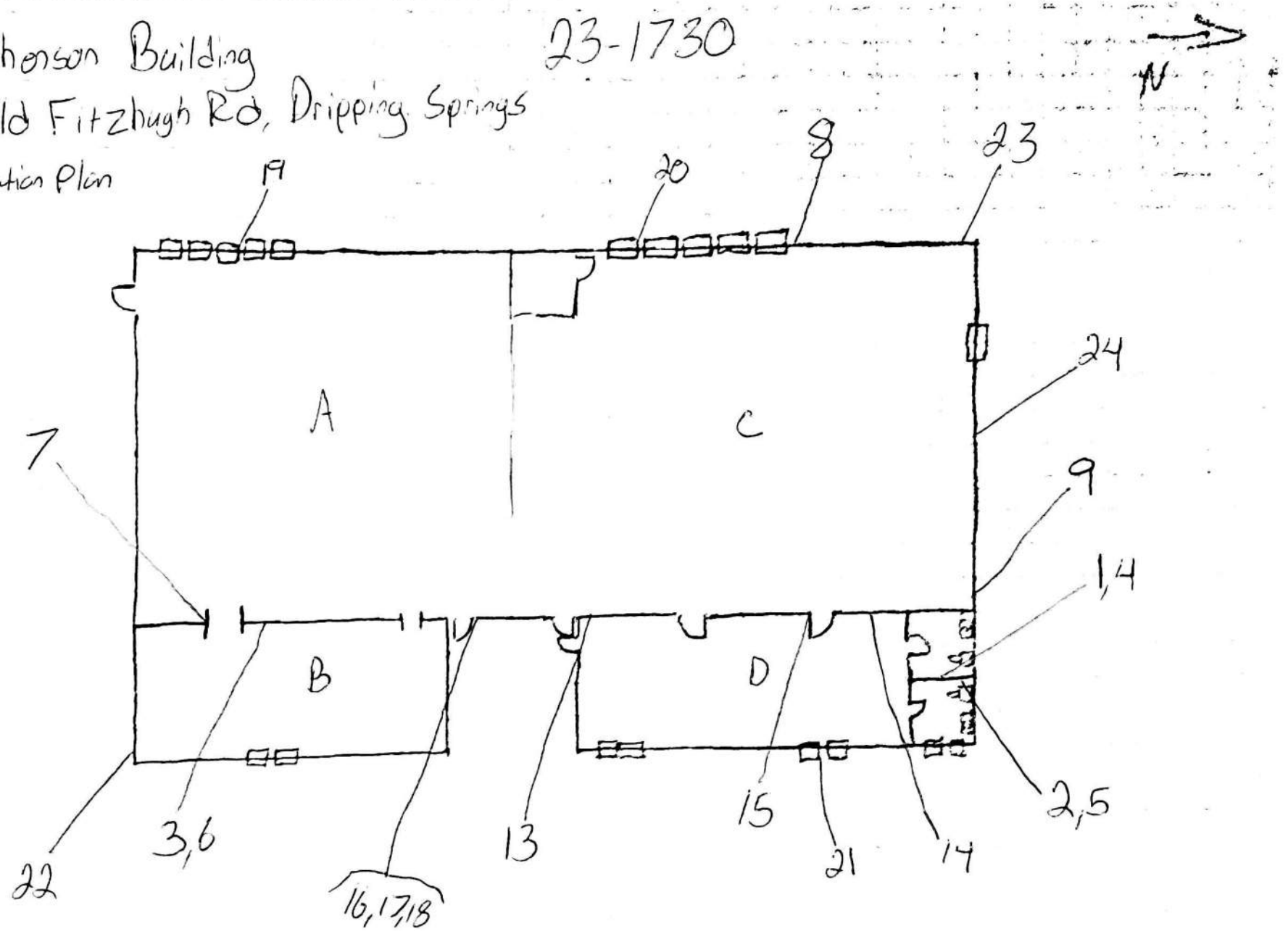


Exterior Window Glazing
~ 29 windows
Sample # 19-21

Stephenson Building
101 Old Fitzhugh Rd, Dripping Springs

23-1730

Sample Location Plan



October 11, 2023

Michelle Fischer
City Administrator
City of Dripping Springs
511 Mercer Street
Dripping Springs, Texas 78620

RE: Limited Asbestos Survey of Target Areas at the Site Related to Proposed Demolition/Renovation
Stephenson Building
101 Old Fitzhugh Road, Dripping Springs, Texas 78620
Project #23-1730

Dear Ms. Fischer:

Champion Environmental Consulting Inc. (Champion Environmental) was retained by **City of Dripping Springs** (Hereinafter, the Client) to conduct a limited asbestos survey at the Site within the following Target Areas as identified by the Client.

Stephenson Building – Dripping Springs, TX

The attached report summarizes these services in accordance with our discussion. **Regulated amounts of asbestos were detected in the following materials and in the approximate quantities**

Sample #(s)	Location	Material	Result – Asbestos %	APPROXIMATE Quantity
19-21	All Exterior Windows except the one on the North Side Northwest corner	Window Glazing	2% Chrysotile	29 Windows

The laboratory analytical results are attached in Appendix A of this report. Licenses are attached in Appendix B of this report. The Sample Location Drawing is attached in Appendix C of this report. If you have any questions on this report or any other matter, please do not hesitate to call me at (512) 992-5383.

Sincerely,

Champion Environmental Consulting, Inc.

Wade Champion
Individual Asbestos Consultant
DSHS License No. 10-5410
Expiration Date 8/25/25

1.0 Services

Table I Services Summary	
Client	City of Dripping Springs 511 Mercer Street Dripping Springs, Texas 78620
Site Address	101 Old Fitzhugh Road, Dripping Springs, Texas 78620
Target Areas identified by Client	Stephenson Building – Dripping Springs, TX
Scope of Work 1. Conduct a preliminary visual reconnaissance of the renovation /demolition Target Areas identified by the client to visually determine the presence of suspect ACM 2. In the event suspect ACM is identified, visually assess suspect ACM for variations in color, texture, thickness, and other characteristics useful in determining the material's uniformity and homogenous area 3. In the event suspect ACM is identified, evaluate current physical condition, friability and potential for damage, assign hazard ratings and estimate quantities 4. Collect samples of identified and reasonably accessible suspect ACM within Target Areas 5. Send suspect ACM samples to laboratory for analysis of asbestos content, if any 6. Prepare report summarizing results	
Sample Date(s)	October 4, 2022
Inspector(s) DSHS License #	Cole Allen 603654
Samples Collected:	A total of 24 samples of suspect asbestos-containing materials were collected, as agreed with the Client, within reasonably accessible portions of the Target Areas
Analytical Lab:	CA Labs, LLC asbestos laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) through the National Institute for Standards and Technology (ID Code No 200772-0) and licensed as a DSHS licensed asbestos bulk laboratory (License No. 30-0370)
No. of Samples Analyzed	24
Analyzed Date:	October 6, 2022
Report Number:	CBR23107716
Analytical Method:	Polarized Light Microscopy (PLM) using the Environmental Protection Agency (EPA) "Interim Method for Determination of Asbestos in Bulk Insulation Samples" [40 CFR Chapter 1 (1-1-87 Edition) Part 763, Subpart F, Attachment III]
General Information about Suspect ACM Asbestos has historically been a component of a wide variety of building materials. These types of building materials, which may potentially contain asbestos, are termed suspect asbestos-containing materials" or suspect ACM). Suspect ACM may or may not contain asbestos. The actual asbestos content of a suspect material can be determined only through proper sampling and analysis performed by a qualified building inspector and laboratory. Pursuant to the National Emission Standards for Hazardous Air Pollutants (NESHAP) asbestos regulations (40 CFR§61:141, et seq) ACM can be classified into two categories; friable ACM which can be reduced to powder or crumbled under light hand pressure (e.g. ceiling textures and thermal system insulation) and non-friable ACM, which are materials that cannot be easily crumbled (e.g. floor tile and floor tile mastic). Regulated asbestos containing materials (RACM) which are those materials containing over 1% asbestos as defined under asbestos NESHAP.	

2.0 Standard of Care and Limitations:

This report was prepared for the exclusive use of the Client named herein to aid in the identification and management of ACM and RACM in the renovation/demolition Target Areas identified by the Client. Champion Environmental performed its service in a manner consistent with the level of care and expertise exercised by asbestos professional performing the same or similar services at the same time and in the same geographic area.

Samples for this asbestos survey were collected from discrete sample location within the rooms and areas specifically identified herein (i.e., Target Areas). While attempts were made to obtain representative samples most likely to contain asbestos, finding and conclusions herein are necessarily limited by the number of samples taken and access provided for sampling activities. *The results herein cannot guarantee that no asbestos is present in any area not sampled*. This asbestos survey *was not intended to be a comprehensive asbestos inspection of the site*, nor was it intended to be used for evaluation of worker health and safety conditions. To determine whether regulated ACM is present at other locations not sampled herein, *a comprehensive asbestos inspection of the site* would be necessary.

Conclusions and recommendations herein represent the professional opinions of the Champion Environmental Consulting personnel involved with the project. The results of this report should not be considered as legal interpretation of existing federal, state or local environmental, health and safety laws or regulations. Champion Environmental Consulting, Inc., assumes no responsibility or liability for errors in information or data provided by third party sources.

3.0 Report Use and Reliance:

This report represents Champion Environmental's services as of the sampling date. As our final document, it may not be altered after final issuance. This study and report were prepared on behalf of and for the exclusive use of the Client solely its use and reliance in determining the presence of FACM in identified Target Areas of the site. The Client was the only party to which Champion Environmental explained the risks and was solely involved in shaping the scope of the services. Accordingly, reliance on this report by any other party may involve assumptions leading to an unintended interpretation of findings and opinions. With the consent of Champion Environmental and the Client, Champion Environmental may offer reliance to third parties or contract with other parties to develop findings and opinions related to such party's unique risk management concerns. Notwithstanding the foregoing, any and all third party reliance upon this Report shall be limited to the fair market value of services undertaken to perform this Report as of the report date.

4.0 Methodologies:

4.1 Sampling

This limited inspection was guided by the Texas Asbestos Health Protection Rules (TAHPR) (see 25 TAC §296) and generally in accord with AHERA (the Asbestos Hazard Emergency Response Act of 1986, Public law 99-519) sampling protocols (see 40 CFR §§ 763.86 and 763.88). The AHERA sampling protocols are statistically-based and were originally developed to implement AHERA which amends the Federal Toxic Substances Control Act (see 15 USC, §2641, et seq). These rules are often followed by the OSHA, and the Department of State Healthy Services (DSHS). Champion Environmental generally followed these sampling protocols to in an effort to collect representative samples of the various suspect building materials in the Target Areas.

Suspect ACM samples were collected by physically removing a small portion (approximately one square inch) of the suspect material using a sharp instrument. All layers of the material samples were penetrated and registered as separate samples. Disturbance of adjacent material was minimized during the sampling activities. Each sample was place into a separate container and then sealed. Each sample was labeled with the sample number and collected location, and a chain-of-custody form was completed. The sampling instrument was cleaned between each sample collected to mitigate potential cross contamination between samples collected.

4.2 Analytical Procedures

If the results of the bulk laboratory analysis reveal asbestos, the percentage of asbestos contained within the sample is compared with the criteria outlined in the EPA definition of asbestos-containing material (and which value is also followed by OSHA and DSHS). If a concentration of greater than one percent (1%) asbestos is reported, it is defined by the Asbestos NESHAP as a positive identification and the material could be considered RACM depending upon the nature of the ACM and its coverage.

The Asbestos NESHAP states the RACM (as defined in 40 CFR §61.141) containing less than 10% asbestos should be verified by point counting. If bulk sampling analysis determines that asbestos content of a friable asbestos sample is less than 10%, the building owner may;(i) elect to assume the asbestos content to be greater than 1% and treat the material as RACM, or (ii) require verification of asbestos content by point counting. If a result obtained by point counting is different from a result obtained by visual estimation, the point count result is used.

5.0 Recommendations:

Based upon the forgoing results, **if applicable,** Champion Environmental Consulting, Inc. offers the recommendations presented below. Such recommendations should be implemented prior to the commencement of any renovation or demolition activities or any other activities that would potentially disturb the identified ACM or RACM at the site.

- Identified ACM. Including non-friable ACM *that will be disturbed by renovation or demolition activities* should be removed as soon as feasibly possible by appropriately licensed personnel and in accordance with applicable laws and regulations.

- Identified ACM which *will not be disturbed by renovation or demolition activities but which is damaged* should be repaired or encapsulated (by appropriately licensed personnel and in accordance with applicable laws and regulations) to prevent future damage.

- *ACM to remain* in place should be enclosed in airtight impermeable barrier or encapsulated to prevent damage.

- An *Asbestos Operation and Maintenance Program* should be implemented to manage existing ACM in place.

In the event renovation or demolition activities are slated for portions of the site outside of the Target Areas, an asbestos survey should be performed for those portions of the site –prior to the initiation of renovation or demolition activities.

APPENDIX A

Laboratory Results

Limited Asbestos Survey of Target Areas at the Site Related to Proposed Demolition/Renovation

Stephenson Building – Dripping Springs, TX

Project #23-1730

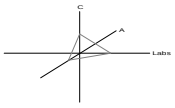
Laboratory Analytical Results Summary

Sample #(s)	Location	Material	Result – Asbestos %	APPROXIMATE Quantity
19-21	All Exterior Windows except the one on the North Side Northwest corner	Window Glazing	2% Chrysotile	29 Windows

Note: Refer to attached laboratory report for details

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

Champion Environmental
109 W 7th St, Suite 210
Georgetown, TX 78626

Attn: Wade Champion
Customer Project: Stephenson Building-Dripping Springs
Reference #: CBR23107776 Date: 10/6/2023

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be detectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

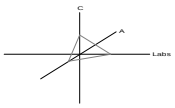
Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. This report is not covered by the scope of AIHA accreditation. Analysis performed at CA Labs, LLC 12232 Industriplex, Suite 32 Baton Rouge, LA 70809.

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634



NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Overview of Project Sample Material Containing Asbestos

Customer Project: Stephenson Building-Dripping Springs **CA Labs Project #:** CBR23107776

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
				White Sealant
19	***19-1***	***White Sealant***	***2% Chrysotile***	
20	***20-1***	***White Sealant***	***2% Chrysotile***	
21	***21-1***	***White Sealant***	***2% Chrysotile***	

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Wade Champion
Champion Environmental
109 W 7th St, Suite 210
Georgetown, TX 78626

Phone # 512-992-5383
Fax # 512-597-8787

Customer Project: Stephenson Building-Dripping Springs

Turnaround Time: 24 hr

CA Labs Project #: CBR23107776

Date: 10/6/2023
Samples Received: 10/6/2023
Date Of Sampling: 10/4/2023
Purchase Order #: 23-1730

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
1		***1-1***	***White Textured Surfacing***	***N***	***None Detected***		100% qu, mi, bi, ca
		1-2	***White Drywall with Paper***	***N***	***None Detected***	10% ce	90% qu, gy
2		***2-1***	***White Textured Surfacing***	***N***	***None Detected***		100% qu, mi, bi, ca
		2-2	***White Drywall with Paper***	***N***	***None Detected***	10% ce	90% qu, gy
3		***3-1***	***White Compound***	***Y***	***None Detected***		100% qu, mi, ca
		3-2	***White Drywall with Paper***	***N***	***None Detected***	10% ce	90% qu, gy
4		***4-1***	***White Textured Surfacing***	***N***	***None Detected***		100% qu, mi, bi, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Wade Champion
Champion Environmental
109 W 7th St, Suite 210
Georgetown, TX 78626

Phone # 512-992-5383
Fax # 512-597-8787

Customer Project: Stephenson Building-Dripping Springs

Turnaround Time: 24 hr

CA Labs Project #: CBR23107776

Date: 10/6/2023
Samples Received: 10/6/2023
Date Of Sampling: 10/4/2023
Purchase Order #: 23-1730

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
5		***5-1***	***White Textured Surfacing***	***N***	***None Detected***		100% qu, mi, bi, ca
		5-2	***White Drywall with Paper***	***N***	***None Detected***	10% ce	90% qu, gy
6		***6-1***	***White Compound***	***Y***	***None Detected***		100% qu, mi, ca
7		***7-1***	***Tan Surfaced Gray Plaster***	***N***	***None Detected***		100% qu, ma, bi, ca
8		***8-1***	***Tan Surfaced Gray Plaster***	***N***	***None Detected***		100% qu, ma, bi, ca
9		***9-1***	***Tan Surfaced Gray Plaster***	***N***	***None Detected***		100% qu, ma, bi, ca
10		***10-1***	***White Sealant on Wrap***	***N***	***None Detected***	10% fg 40% ce	50% qu, ma, ot

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Wade Champion
Champion Environmental
109 W 7th St, Suite 210
Georgetown, TX 78626

Phone # 512-992-5383
Fax # 512-597-8787

Customer Project: Stephenson Building-Dripping Springs

Turnaround Time: 24 hr

CA Labs Project #: CBR23107776

Date: 10/6/2023
Samples Received: 10/6/2023
Date Of Sampling: 10/4/2023
Purchase Order #: 23-1730

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
11		***11-1***	***White Sealant on Wrap***	***N***	***None Detected***	10% fg 40% ce	50% qu, ma, ot
12		***12-1***	***White Sealant on Wrap***	***N***	***None Detected***	10% fg 40% ce	50% qu, ma, ot
13		***13-1***	***Black Cove Base***	***Y***	***None Detected***		100% qu, ma
		13-2	***Yellow and Brown Mastic***	***N***	***None Detected***		100% qu, bi
14		***14-1***	***Black Cove Base***	***Y***	***None Detected***		100% qu, ma
		14-2	***Yellow and Brown Mastic***	***N***	***None Detected***		100% qu, bi
15		***15-1***	***Black Cove Base***	***Y***	***None Detected***		100% qu, ma

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Wade Champion
Champion Environmental
109 W 7th St, Suite 210
Georgetown, TX 78626

Phone # 512-992-5383
Fax # 512-597-8787

Customer Project: Stephenson Building-Dripping Springs

Turnaround Time: 24 hr

CA Labs Project #: CBR23107776

Date: 10/6/2023
Samples Received: 10/6/2023
Date Of Sampling: 10/4/2023
Purchase Order #: 23-1730

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		15-2	***Yellow and Brown Mastic***	***N***	***None Detected***		100% qu, bi
16		***16-1***	***Yellow Mastic***	***Y***	***None Detected***		100% qu, bi
17		***17-1***	***Yellow Mastic***	***Y***	***None Detected***		100% qu, bi
18		***18-1***	***Yellow Mastic***	***Y***	***None Detected***		100% qu, bi
19		***19-1***	***White Sealant***	***Y***	***2% Chrysotile***		98% qu, ma, ca
20		***20-1***	***White Sealant***	***Y***	***2% Chrysotile***		98% qu, ma, ca
21		***21-1***	***White Sealant***	***Y***	***2% Chrysotile***		98% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

NVLAP #200772-0
TDSHS #300370
CDPHE #AL-18111
LELAP #03069

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Wade Champion
Champion Environmental
109 W 7th St, Suite 210
Georgetown, TX 78626

Phone # 512-992-5383
Fax # 512-597-8787

Customer Project: Stephenson Building-Dripping Springs

Turnaround Time: 24 hr

CA Labs Project #: CBR23107776

Date: 10/6/2023
Samples Received: 10/6/2023
Date Of Sampling: 10/4/2023
Purchase Order #: 23-1730

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
22		***22-1***	***Gray Mortar***	***Y***	***None Detected***		100% qu, ma, ca
23		***23-1***	***Gray Mortar***	***Y***	***None Detected***		100% qu, ma, ca
24		***24-1***	***Gray Mortar***	***Y***	***None Detected***		100% qu, ma, ca

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Zo Andriampenomanana
Analyst

Senior Analyst
Alicia Stretz

Laboratory Director
Chris Williams

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs

C.A. Labs, LLC.
12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
Mobile: 225-993-3471

Chain of Custody

Client Name:	Champion Environmental Consulting	**CA Labs job #**	CBR23107776
Client Address:	109 W 7th St.	Billing Address: (if different)	Same
	Suite 210		
	Georgetown TX 78626		
phone number:	512 992 5383		
fax number:	N/A	Send Reports to:	wchampion@c-eci.com
Project Number:	23-1730	Project Name:	Stephenson Building - Dripping Springs
Contact:	Wade Champion	**Reports Results** VIA:	EMAIL X FAX ___ VERBAL ___

Total # Samples Submitted:	**Total # Samples to be Analyzed:**	**Material Matrix:**
24	24	Air / (Bulk) / Water

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	**TA Time**	**(PLM)**	**TA Time**	**Optical / IAQ**	**TA Time**
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	**Allergen Particle:**	*2 hour*
AHERA	*4 hour*	Improved	4 hour	tape/bulk/swab	4 hour
EPA Level II	8 hour	Interim	8 hour	Cyclex-d cassettes	8 hour
Drinking Water	16 hour		16 hour	Air-o-cell cassettes	16 hour
Wipe	24 hour	AHERA	(24 hour)	Anderson cultures	24 hour
Micro-vac	2 days		2 days	Bulk/swab cultures	2 days
NIOSH 7402	3 days	Point Count -	3 days	Bacteria cultures	3 days
Chatfield Bulk	5 days	(NESHAPS)	5 days	**PCM:** NIOSH 7400	5-10 days

Lead: *Circle analysis and TA time*

Matrix:	Paint Chips	Soil	Air	Wipes	Wastewater	TCLP
TA Time:	***8 hour***	1 day	2 days	3 days	5 days	6-10 days

Sample Information:

Sample Number:	**Sample Location:**	**Sample Date/Time:**	**Sample Volume (L)**
1	WT/DW - Restrooms	10-4-23	
2	↓ ↓	↓	
3	↓ Room B	↓	
4	3C Restrooms	↓	
5	↓ ↓		

Custody Information:

Samples relinquished: [signature] 10-4-23/1800 — Signature / Date / Time

Samples received: [signature] 9:40 10/6/23 — Signature / Date / Time

Samples relinquished: ______ Signature / Date / Time

Samples received: ______ Signature / Date / Time

CA Labs

12232 Industriplex
Suite 32
Baton Rouge, LA 70809

Phone: 225-751-5632
Fax: 225-751-5634
After hours Mobile: 225-993-3471

Client Name: Champion Environmental Consulting

Client Address: 109 W 7th St. Suite 210
Georgetown TX 78626

phone number: 512 992 5383

fax number: N/A

Project Number: 23-1730

Contact: Wade Champion

CA Labs job # CBR 23107776

Billing Address: Same
(if different)

Send Reports to: wchampion@c-eci.com

Project Name: Stephenson Building - Dripping Springs

Reports Results
VIA: EMAIL X **FAX**____ **VERBAL**___

Sample Number:	Sample Location:	Sample Date/Time:	Sample Volume (L)
6	JC - Room B	10-4-23	
7	Plaster Texture		
8	↓		
9	↓		
10	Duct Mastic		
11	↓		
12	↓		
13	CBM		
14	↓		
15	↓		
16	Residual Mastic on Duct Frame		
17	↓		
18	↓		
19	Window Glazing		
20	↓		
21	↓		
22	Ext Stone Mortar		
23	↓		
24	↓		
		↓	

For internal use:
Any initial changes regarding project (indicate yes by checking line)_____

Custody Information:
Samples relinquished: 10-4-23 1500
Signature / Date / Time

Samples received: 9:40 10/6/23
Signature / Date / Time

Samples relinquished:
Signature / Date / Time

Samples received:
Signature / Date / Time

APPENDIX B

Licenses

Texas Department of State Health Services

CHAMPION ENVIRONMENTAL CONSULTING INC

is certified to pursuant as an

Asbestos Consultant Agency

in the State of Texas and is hereby governed by the rights, privileges and responsibilities set forth in Texas Occupations Code, Chapter 1954 and Title 12, Texas Administrative Code, Chapter 295 relating to Texas Asbestos Health Protection, as long as this license is not suspended or revoked.

License Number: 100522 *Expiration Date: 04/01/2025*

Control Number: 97564 *Jennifer Shuford, MD, MPH, Commissioner of Health* *(Void After Expiration Date)*

VOID IF ALTERED NON-TRANSFERABLE

SEE BACK

Texas Department of State Health Services

CA LABS LLC

is certified to pursuant as an

Asbestos Laboratory
PCM, PLM, TEM

in the State of Texas and is hereby governed by the rights, privileges and responsibilities set forth in Texas Occupations Code, Chapter 1954 and Title 12, Texas Administrative Code, Chapter 295 relating to Texas Asbestos Health Protection, as long as this license is not suspended or revoked.

License Number: 300370 *Expiration Date: 01/04/2025*

Control Number: 96685 *Jennifer Shuford, MD, MPH, Commissioner of Health* *(Void After Expiration Date)*

VOID IF ALTERED NON-TRANSFERABLE

SEE BACK

Texas Department of State Health Services

Asbestos Individual Consultant

WADE E CHAMPION
License No. 105410
Control No. 98246
Expiration Date: 25-Aug-2025

Texas Department of State Health Services

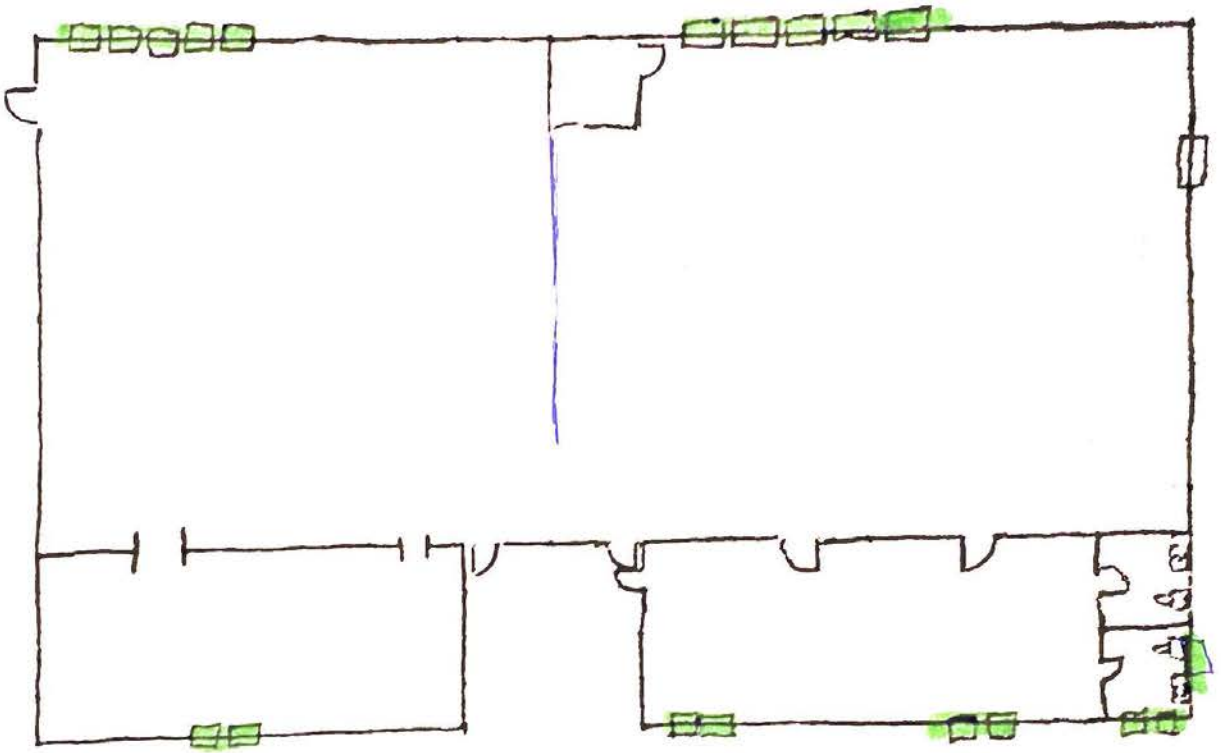
Asbestos Inspector

COLE H ALLEN
License No. 603654
Control No. 100198
Expiration Date: 10-Jan-2024

APPENDIX C

Sample Location Drawing(s)

Stephenson Building
101 old Fitzhugh Rd, Dripping Springs
Asbestos Location Plan 23-1730

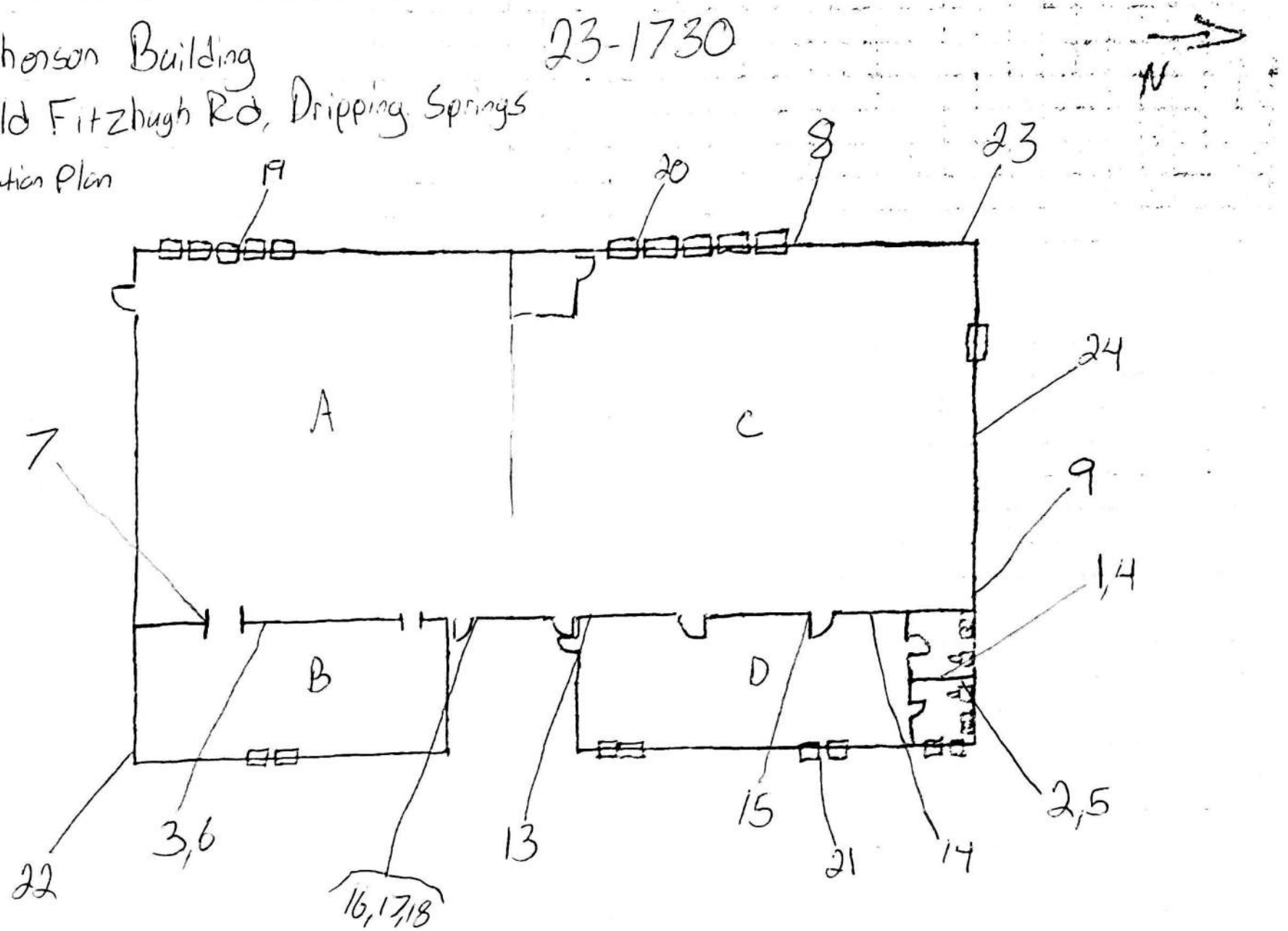


Exterior Window Glazing
~ 29 windows
Sample # 19-21

Stephenson Building
101 Old Fitzhugh Rd, Dripping Springs

23-1730

Sample Location Plan



ASBESTOS ABATEMENT PROJECT DESIGN

Stephenson Building
Window Sashes
101 Old Fitzhugh Road
Dripping Springs, Texas 78620

CEC PROJECT NUMBER 23-1730

October 18, 2024

Champion Environmental Consulting, Inc.
109 W 7th St, Suite 210, Georgetown, TX 78626 *main* (512) 992-5383

SITE: Stephenson Building
101 Old Fitzhugh Road
Dripping Springs, Texas 78620

CONTRACTOR: TBD
Texas Licensed Asbestos Abatement Contractor

1.0 SCOPE OF ASBESTOS ABATEMENT PROJECT

The Scope of the asbestos abatement project consists of removal of the following:

Material/Area		APPROX Quantity
Window Glazing All exterior windows except the one on the North Side Northwest corner (Remove and dispose of sashes only - frames to remain in place for LBP removal)		29 Windows

Refer to attached sketch/drawing(s)

Contractor shall abate window/exterior materials utilizing NESHAP Methods and properly dispose of the aforementioned building materials as asbestos containing material (ACM) or asbestos contaminated materials for this project.

This project will be completed under the guidelines of all federal, state, and local regulations regarding the removal of asbestos containing materials as well as this project specification. Final clearance for this project will utilize Phase Contrast Microscopy (PCM) and aggressive sampling techniques. OSHA Compliance Air Monitoring will be the responsibility of the contractor. **It is the Contractor's responsibility to verify the quantities of all materials.**

Wade Champion, IAC
DSHS License Number 10-5410
Expiration Date 08/25/2025

Wade Champion
License No. 10-5410
Expires 08/25/2025

PART 1 – GENERAL

1.01 REGULATIONS:

A. Comply with the requirements of the Environmental Protection Agency (EPA) regulations. National Emission Standards for Hazardous Air Pollutants (Asbestos NESHAP), U. S. Department of Labor, Occupational Safety and Health Administration (OSHA) regulations on asbestos, Respiratory Protection, Toxic Air Pollutants and License to Remove or Encapsulate Asbestos, Texas Department of Health (*Texas Asbestos Health Protection Rules)* as revised July 8, 2021, and any applicable local government regulations which are incorporated by reference.

1.02 SCOPE OF WORK:

A. The Contractor shall furnish all labor, materials, services, insurance, and equipment necessary to carry out the asbestos abatement of ACM in accordance with all current and applicable Federal Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA), and Texas Department of Health (*Texas Asbestos Health Protection Rules)* as revised July 8, 2021.
B. Remove material, which is Asbestos Containing Building Materials (ACBM) (See Drawings Appendix C).
C. Dispose of all ACBM materials in accordance with all applicable Federal and State of Texas regulations and these specifications at an approved disposal site. The Contractor shall be responsible for obtaining approval for disposal of all asbestos contaminated material generated by the abatement project, prior to start, at an EPA approved landfill in compliance with all federal, state, and local regulations.

1.03 ON-SITE DOCUMENTATION

A. The Contractor shall post all applicable permits and regulations.
B. The Contractor shall maintain at the job site all Federal, EPA, OSHA, State of Texas, and city notifications and regulations (as applicable).
C. The Contractor shall maintain at the job site all employee medical asbestos physicals indicating medical clearance to wear a respirator; respirator fit tests, employee roster sign-in sheets, and SDS sheet for products used.

1.04 CONTRACTOR QUALIFICATIONS

A. The Contractor must be able to comply with all requirements of this solicitation and specification.
B. The Contractor must comply to the following requirements for the project:
1. Document to CONSULTANT, the Asbestos Consultant, that all employees who will come into contact with the ACBM or be responsible for the asbestos work are medically qualified to wear a respirator and have a current asbestos physical. CONSULTANT will supervise and perform respirator fit tests for all of the Contractor employees who will come into contact with ACBM.
2. Demonstrate prior experience on jobs of similar nature and scope.

Wade Champion
License No. 10-5410
Expires 08/25/2025

1.05 SUBMITTALS

A. Items shall be submitted to and approved by CONSULTANT in this section prior to commencing work involving asbestos materials.
B. Landfill: Submit written evidence that the landfill for disposal is licensed for asbestos disposal by the USEPA and state or local regulatory agency(s) and is in accordance with all other terms and conditions for landfills addressed in other paragraphs of this specification.
C. Submit documentation that each employee has received an asbestos physical and has received medical clearance to wear a respirator; submit certificates signed by each employee that the employee understands the health implications and risks involved, including illnesses possible from exposure to airborne asbestos fibers, understands the use and limits of the respiratory equipment to be used, and understands the results of monitoring of airborne quantities of asbestos as related to health and respiratory equipment.
D. Properly completed notification(s) to the Texas Department of Health Toxic Substance Control Division, and any other City or local departments required by this specification.
E. Copies of all Federal, EPA, OSHA, State of Texas, or any other necessary regulations to be maintained at the job site.

1.06 AIR MONITORING

A. Air monitoring will be performed during the entire removal, as specified, or as deemed necessary by CONSULTANT.

1.07 UTILITIES

A. The Owner shall provide electrical power for the project from available power outlets. The Contractor shall furnish all extension cords and construction type ground fault protected power outlet assemblies.
B. The Owner shall furnish water for the project from readily available hose bibs. The Contractor shall furnish all water hoses and devices.

1.08 ASBESTOS REMOVAL LOCATIONS

A. The asbestos abatement work shall generally include the following:
   1. *EXTERIOR Window materials* (See Appendix C – REFERENCE DRAWING(S)).

1.09 PROJECT AND AREA CLEANUP

A. On a daily basis, the Contractor shall clean the asbestos work area immediately upon completion of the removal procedures. The Contractor shall also police the entire building perimeter grounds for ACBM and properly dispose of any loose ACBM debris on a daily basis.
B. At the end of each day, prior to leaving the job site, the Contractor shall thoroughly clean the entire job site in a manner acceptable to CONSULTANT.

Wade Champion
License No. 10-5410
Expires 08/25/2025

PART 2 – PRODUCTS

1.01 GENERAL

A. Products and materials required for the project shall be new, of best quality and grade of standard manufacturer, and shall conform to the requirements of the asbestos abatement industry.

B. Typical products required for the project are listed below:
   1. Full-bodied protective coveralls including hood and boots;
   2. Half-face, full-face or powered air purifying respirators. All respirators shall be NIOSH approved;
   3. High efficiency particulate air (HEPA) filters (P100 or equivalent) for respirators;
   4. True six (6) mil asbestos disposal bags pre-labeled with the dangers related to asbestos;
   5. Danger signs and barrier tape;
   6. Surfactant (Wetting Agent): Mixture consisting of 50% poly-oxyethylene ether and 50% poly-glycol ether, or equivalent, and shall be mixed with water to provide “amended water” with a concentration of one ounce of surfactant to five (5) gallons of water; and
   7. Sealing tape.

PART 3 – EXECUTION

3.01 GENERAL

A. The Contractor shall perform the asbestos abatement and disposal according to the requirements stipulated and outlined in these specifications.

3.02 METHOD OF REMOVAL

A. Workers shall wear approved, properly fitted, and fit-tested National Institute for Occupational Safety and Health (NIOSH) respirators equipped with high efficiency particulate air (P100 or equivalent) filters approved for asbestos removal. CONSULTANT shall perform and document the fit testing of the employees as previously stated. Workers shall wear disposable, full-bodied coveralls with head covers and footwear at the work areas. These will be disposed of in asbestos disposal bags at the end of each asbestos removal work period.

B. Provide danger signs at all approaches to asbestos regulated areas. Locate signs at such a distance that personnel may read the sign and take the necessary protective steps required before entering the area. Provide labels and affix to all asbestos materials, scrap, waste, debris, and other products contaminated with asbestos. Signs and labels shall be in accordance with 29 CFR 1926.1101 OSHA Asbestos Standard. Ensure that roof level heating and ventilation air intake sources are shut down. Seal all openings with true weight six (6) mil polyethylene.

C. For the entire project the air will be monitored both personally for workers and environmentally to ensure that the Contractor meets EPA Clean Air Standards. The air monitoring will be conducted by CONSULTANT. During the time the air is being monitored, the Contractor must ensure that all workers directly involved with the ACBM removal procedures wear full-bodied protective clothing and at a minimum half face dual cartridge air purifying respirators with High Efficiency Particulate Air (HEPA) filters (P100 or equivalent).

D. ACBM removal shall be consistent with the OSHA Asbestos Standard (29 CFR 1926.1101), August 1994, as corrected June 29, 1995, Section (g) Method of Compliance, Paragraph 8(ii), as outlined below:

Wade Champion
License No. 10-5410
Expires 08/25/2025

1. For removing material which contains ACBM, the employer shall ensure that the following work practices are followed:
   a. material shall be removed in an intact state to the extent feasible.
   b. Wet methods shall be used to remove materials that are not intact, or that will be rendered not intact during removal, unless such wet methods are not feasible or will create safety hazards.
   c. The wetted ACBM shall be double bagged in approved true weight six (6) mil polyethylene labeled bags. At the end of each removal operation, the bags shall be placed in an enclosed dumpster/trailer, contained and pad locked. All asbestos contaminated articles such as suits, gloves, filters, etc. shall also be disposed of in double six (6) mil labeled polyethylene bags. Bags shall not be damaged in any way. To ensure that the bags do not become damaged, the Contractor may elect to place the bags in sealed and labeled fiber drums. CONSULTANT will determine the integrity of the sealed asbestos labeled bags and instruct the Contractor accordingly. All polyethylene bags utilized for the ACBM must be pre-labeled from the factory with the appropriate asbestos label. In addition, the Contractor must label the top bag of each double bagged ACBM with the appropriate generator information.
   d. The asbestos materials shall be transported from the work areas to the enclosed container in a method that protects the integrity of the bags or drums from asbestos fiber release and/or spreading of asbestos debris. Through discussion with the Contractor, CONSULTANT will determine the safest method to accomplish this procedure:

1. Refer to OSHA Asbestos Standard (29 CFR 1926.1101), August 1994 as corrected June 29, 1995, listed below:

a. Asbestos containing material that has been removed *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 to the ground via covered, dust tight chute, crane, or hoist:

1.) Any ACBM that is not intact shall be lowered to the ground as soon as it is practicable, but in any event no later than the end of the work shifts. While the material remains on the roof it shall either be kept wet, placed in an impermeable waste bag, or wrapped in plastic sheeting.

2.) Intact ACBM shall be lowered to the ground as soon as is practicable, but in any event no later than the end of the work shift.

b. Upon being lowered, unwrapped material shall be transferred to a closed receptacle in such manner so as to preclude the dispersion of dust.

c. Roof level heating and ventilation air intake sources shall be isolated, or the ventilation system shall be shut down.

E. Transporting of the ACBM to an EPA approved landfill must be accomplished by an approved and Texas Department of Health licensed asbestos transporting company. The asbestos shall be properly labeled. It is the Contractor's responsibility to ensure that the ACBM reaches the approved landfill in an acceptable condition. Final disposal of asbestos-containing waste material shall be within 30 days of the project completion or when receiving container is full, whichever is sooner.

F. No later than thirty (30) days after completion of the ACBM removal, the Contractor shall furnish CONSULTANT three (3) copies of project documentation which shall include at a minimum, waste shipment records (manifest), employee physicals, employee respirator clearances, employee certificates of understanding regarding the handling of asbestos, typed daily project details, notifications, insurance certificates, SDS sheets, and all other relevant documents as determined by CONSULTANT.

Wade Champion
License No. 10-5410
Expires 08/25/2025

TECHNICAL SPECIFICATION USE AND RELIANCE

The technical specifications presented herein are an instrument of professional service developed by Champion Environmental Consulting, Inc. (CEC) in contemplation of a wide array of project-specific variables, including how the documents will be used, by whom and under what project management scheme. Because CEC may be liable for the adequacy of these technical specifications and any unauthorized reuse could result in misuse of CEC's findings, recommendations or other service elements for which CEC cannot anticipate risk and liability, use of these technical specifications (including reliance, duplication, copying, quoting or excerpting) is limited to CEC, as project manager of the above-referenced project for the client named herein. Any other party, including contractors or consultants, wishing to use, rely upon, excerpt, copy, duplicate or otherwise reproduce these specifications must apply to CEC for written authorization to do so with such approval in the sole discretion of CEC.

Wade Champion
License No. 10-5410
Expires 08/25/2025

APPENDIX A
LICENSES

Texas Department of State Health Services

CHAMPION ENVIRONMENTAL CONSULTING INC

is certified to perform as an

Asbestos Consultant Agency

in the State of Texas and is hereby governed by the rights, privileges and responsibilities set forth in Texas Occupations Code, Chapter 1954 and Title 12, Texas Administrative Code, Chapter 295 relating to Texas Asbestos Health Protection, as long as this license is not suspended or revoked.

License Number: 100522

Expiration Date: 04/01/2025

Jennifer Shuford, MD, MPH, Commissioner of Health

Control Number: 97564

(Void After Expiration Date)

VOID IF ALTERED - NON-TRANSFERABLE

SEE BACK

Texas Department of State Health Services

CHAMPION ENVIRONMENTAL CONSULTING INC

is certified to perform as an

Asbestos Laboratory

PCM

in the State of Texas and is hereby governed by the rights, privileges and responsibilities set forth in Texas Occupations Code, Chapter 1954 and Title 12, Texas Administrative Code, Chapter 295 relating to Texas Asbestos Health Protection, as long as this license is not suspended or revoked.

License Number: 300450

Expiration Date: 06/14/2025

Jennifer Shuford, MD, MPH, Commissioner of Health

Control Number: 96744

(Void After Expiration Date)

VOID IF ALTERED - NON-TRANSFERABLE

SEE BACK

Texas Department of State Health Services

Asbestos Individual Consultant

WADE E CHAMPION

License No. 105410

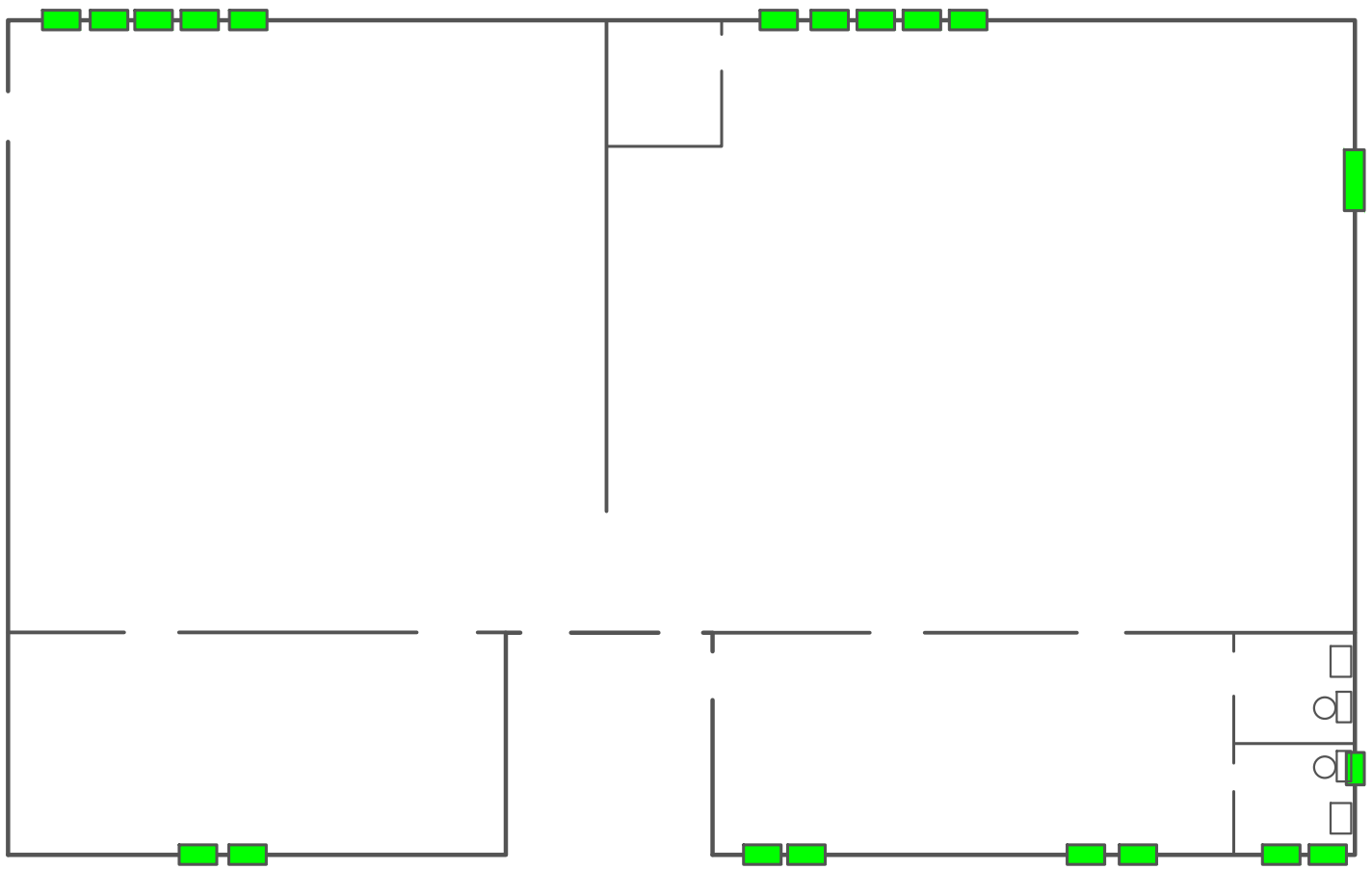
Control No. 98246

Expiration Date: 25-Aug-2025

APPENDIX B
NOTIFICATION(S)

(As Submitted By Licensed Abatement Contractor)

APPENDIX C
REFERENCE DRAWING(S)



Exterior Window Glazing (~29 Windows)
Remove and dispose of sashes only
Frames to remain in place for LBP removal

INDIVIDUAL ASBESTOS CONSULTANT TDH LICENSE NO. 10-5410 TEXAS DEPARTMENT OF HEALTH

Wade Champion
Asbestos Individual Consultant
TDSHS License No. 10-5410
Expiration Date 8/25/2025

CHAMPION environmental consulting
109 West 7th Street
Suite 210
Georgetown, Texas 78626

CLIENT:
CITY OF DRIPPING SPRINGS

511 Mercer Street
Cripping Springs, Texas 78620

SITE: STEPHENSON BUILDING
101 Old Fitzhugh Road
Dripping Springs, Texas 78620

C-ECI Project No. 23-1730
By: N Hackney
Approved By: W Champion
Submitted: 4/4/2024
Not To Scale

Asbestos Abatement Plan

Figure 1

ASBESTOS ABATEMENT PROJECT DESIGN

Stephenson Building
Window Sashes
101 Old Fitzhugh Road
Dripping Springs, Texas 78620

CEC PROJECT NUMBER 23-1730

October 18, 2024

Champion Environmental Consulting, Inc.
109 W 7th St, Suite 210, Georgetown, TX 78626 *main* (512) 992-5383

SITE: Stephenson Building
101 Old Fitzhugh Road
Dripping Springs, Texas 78620

CONTRACTOR: TBD
Texas Licensed Asbestos Abatement Contractor

1.0 SCOPE OF ASBESTOS ABATEMENT PROJECT

The Scope of the asbestos abatement project consists of removal of the following:

Material/Area		APPROX Quantity
Window Glazing All exterior windows except the one on the North Side Northwest corner (Remove and dispose of sashes only - frames to remain in place for LBP removal)		29 Windows

Refer to attached sketch/drawing(s)

Contractor shall abate window/exterior materials utilizing NESHAP Methods and properly dispose of the aforementioned building materials as asbestos containing material (ACM) or asbestos contaminated materials for this project.

This project will be completed under the guidelines of all federal, state, and local regulations regarding the removal of asbestos containing materials as well as this project specification. Final clearance for this project will utilize Phase Contrast Microscopy (PCM) and aggressive sampling techniques. OSHA Compliance Air Monitoring will be the responsibility of the contractor. **It is the Contractor's responsibility to verify the quantities of all materials.**

Wade Champion, IAC
DSHS License Number 10-5410
Expiration Date 08/25/2025

Wade Champion
License No. 10-5410
Expires 08/25/2025

PART 1 – GENERAL

1.01 REGULATIONS:

A. Comply with the requirements of the Environmental Protection Agency (EPA) regulations. National Emission Standards for Hazardous Air Pollutants (Asbestos NESHAP), U. S. Department of Labor, Occupational Safety and Health Administration (OSHA) regulations on asbestos, Respiratory Protection, Toxic Air Pollutants and License to Remove or Encapsulate Asbestos, Texas Department of Health (*Texas Asbestos Health Protection Rules)* as revised July 8, 2021, and any applicable local government regulations which are incorporated by reference.

1.02 SCOPE OF WORK:

A. The Contractor shall furnish all labor, materials, services, insurance, and equipment necessary to carry out the asbestos abatement of ACM in accordance with all current and applicable Federal Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA), and Texas Department of Health (*Texas Asbestos Health Protection Rules)* as revised July 8, 2021.
B. Remove material, which is Asbestos Containing Building Materials (ACBM) (See Drawings Appendix C).
C. Dispose of all ACBM materials in accordance with all applicable Federal and State of Texas regulations and these specifications at an approved disposal site. The Contractor shall be responsible for obtaining approval for disposal of all asbestos contaminated material generated by the abatement project, prior to start, at an EPA approved landfill in compliance with all federal, state, and local regulations.

1.03 ON-SITE DOCUMENTATION

A. The Contractor shall post all applicable permits and regulations.
B. The Contractor shall maintain at the job site all Federal, EPA, OSHA, State of Texas, and city notifications and regulations (as applicable).
C. The Contractor shall maintain at the job site all employee medical asbestos physicals indicating medical clearance to wear a respirator; respirator fit tests, employee roster sign-in sheets, and SDS sheet for products used.

1.04 CONTRACTOR QUALIFICATIONS

A. The Contractor must be able to comply with all requirements of this solicitation and specification.
B. The Contractor must comply to the following requirements for the project:
1. Document to CONSULTANT, the Asbestos Consultant, that all employees who will come into contact with the ACBM or be responsible for the asbestos work are medically qualified to wear a respirator and have a current asbestos physical. CONSULTANT will supervise and perform respirator fit tests for all of the Contractor employees who will come into contact with ACBM.
2. Demonstrate prior experience on jobs of similar nature and scope.

Wade Champion
License No. 10-5410
Expires 08/25/2025

1.05 SUBMITTALS

A. Items shall be submitted to and approved by CONSULTANT in this section prior to commencing work involving asbestos materials.
B. Landfill: Submit written evidence that the landfill for disposal is licensed for asbestos disposal by the USEPA and state or local regulatory agency(s) and is in accordance with all other terms and conditions for landfills addressed in other paragraphs of this specification.
C. Submit documentation that each employee has received an asbestos physical and has received medical clearance to wear a respirator; submit certificates signed by each employee that the employee understands the health implications and risks involved, including illnesses possible from exposure to airborne asbestos fibers, understands the use and limits of the respiratory equipment to be used, and understands the results of monitoring of airborne quantities of asbestos as related to health and respiratory equipment.
D. Properly completed notification(s) to the Texas Department of Health Toxic Substance Control Division, and any other City or local departments required by this specification.
E. Copies of all Federal, EPA, OSHA, State of Texas, or any other necessary regulations to be maintained at the job site.

1.06 AIR MONITORING

A. Air monitoring will be performed during the entire removal, as specified, or as deemed necessary by CONSULTANT.

1.07 UTILITIES

A. The Owner shall provide electrical power for the project from available power outlets. The Contractor shall furnish all extension cords and construction type ground fault protected power outlet assemblies.
B. The Owner shall furnish water for the project from readily available hose bibs. The Contractor shall furnish all water hoses and devices.

1.08 ASBESTOS REMOVAL LOCATIONS

A. The asbestos abatement work shall generally include the following:
   1. *EXTERIOR Window materials* (See Appendix C – REFERENCE DRAWING(S)).

1.09 PROJECT AND AREA CLEANUP

A. On a daily basis, the Contractor shall clean the asbestos work area immediately upon completion of the removal procedures. The Contractor shall also police the entire building perimeter grounds for ACBM and properly dispose of any loose ACBM debris on a daily basis.
B. At the end of each day, prior to leaving the job site, the Contractor shall thoroughly clean the entire job site in a manner acceptable to CONSULTANT.

Wade Champion
License No. 10-5410
Expires 08/25/2025

PART 2 – PRODUCTS

1.01 GENERAL

A. Products and materials required for the project shall be new, of best quality and grade of standard manufacturer, and shall conform to the requirements of the asbestos abatement industry.

B. Typical products required for the project are listed below:
   1. Full-bodied protective coveralls including hood and boots;
   2. Half-face, full-face or powered air purifying respirators. All respirators shall be NIOSH approved;
   3. High efficiency particulate air (HEPA) filters (P100 or equivalent) for respirators;
   4. True six (6) mil asbestos disposal bags pre-labeled with the dangers related to asbestos;
   5. Danger signs and barrier tape;
   6. Surfactant (Wetting Agent): Mixture consisting of 50% poly-oxyethylene ether and 50% poly-glycol ether, or equivalent, and shall be mixed with water to provide “amended water” with a concentration of one ounce of surfactant to five (5) gallons of water; and
   7. Sealing tape.

PART 3 – EXECUTION

3.01 GENERAL

A. The Contractor shall perform the asbestos abatement and disposal according to the requirements stipulated and outlined in these specifications.

3.02 METHOD OF REMOVAL

A. Workers shall wear approved, properly fitted, and fit-tested National Institute for Occupational Safety and Health (NIOSH) respirators equipped with high efficiency particulate air (P100 or equivalent) filters approved for asbestos removal. CONSULTANT shall perform and document the fit testing of the employees as previously stated. Workers shall wear disposable, full-bodied coveralls with head covers and footwear at the work areas. These will be disposed of in asbestos disposal bags at the end of each asbestos removal work period.

B. Provide danger signs at all approaches to asbestos regulated areas. Locate signs at such a distance that personnel may read the sign and take the necessary protective steps required before entering the area. Provide labels and affix to all asbestos materials, scrap, waste, debris, and other products contaminated with asbestos. Signs and labels shall be in accordance with 29 CFR 1926.1101 OSHA Asbestos Standard. Ensure that roof level heating and ventilation air intake sources are shut down. Seal all openings with true weight six (6) mil polyethylene.

C. For the entire project the air will be monitored both personally for workers and environmentally to ensure that the Contractor meets EPA Clean Air Standards. The air monitoring will be conducted by CONSULTANT. During the time the air is being monitored, the Contractor must ensure that all workers directly involved with the ACBM removal procedures wear full-bodied protective clothing and at a minimum half face dual cartridge air purifying respirators with High Efficiency Particulate Air (HEPA) filters (P100 or equivalent).

D. ACBM removal shall be consistent with the OSHA Asbestos Standard (29 CFR 1926.1101), August 1994, as corrected June 29, 1995, Section (g) Method of Compliance, Paragraph 8(ii), as outlined below:

Wade Champion
License No. 10-5410
Expires 08/25/2025

1. For removing material which contains ACBM, the employer shall ensure that the following work practices are followed:
   a. material shall be removed in an intact state to the extent feasible.
   b. Wet methods shall be used to remove materials that are not intact, or that will be rendered not intact during removal, unless such wet methods are not feasible or will create safety hazards.
   c. The wetted ACBM shall be double bagged in approved true weight six (6) mil polyethylene labeled bags. At the end of each removal operation, the bags shall be placed in an enclosed dumpster/trailer, contained and pad locked. All asbestos contaminated articles such as suits, gloves, filters, etc. shall also be disposed of in double six (6) mil labeled polyethylene bags. Bags shall not be damaged in any way. To ensure that the bags do not become damaged, the Contractor may elect to place the bags in sealed and labeled fiber drums. CONSULTANT will determine the integrity of the sealed asbestos labeled bags and instruct the Contractor accordingly. All polyethylene bags utilized for the ACBM must be pre-labeled from the factory with the appropriate asbestos label. In addition, the Contractor must label the top bag of each double bagged ACBM with the appropriate generator information.
   d. The asbestos materials shall be transported from the work areas to the enclosed container in a method that protects the integrity of the bags or drums from asbestos fiber release and/or spreading of asbestos debris. Through discussion with the Contractor, CONSULTANT will determine the safest method to accomplish this procedure:

1. Refer to OSHA Asbestos Standard (29 CFR 1926.1101), August 1994 as corrected June 29, 1995, listed below:

a. Asbestos containing material that has been removed *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 to the ground via covered, dust tight chute, crane, or hoist:

1.) Any ACBM that is not intact shall be lowered to the ground as soon as it is practicable, but in any event no later than the end of the work shifts. While the material remains on the roof it shall either be kept wet, placed in an impermeable waste bag, or wrapped in plastic sheeting.

2.) Intact ACBM shall be lowered to the ground as soon as is practicable, but in any event no later than the end of the work shift.

b. Upon being lowered, unwrapped material shall be transferred to a closed receptacle in such manner so as to preclude the dispersion of dust.

c. Roof level heating and ventilation air intake sources shall be isolated, or the ventilation system shall be shut down.

E. Transporting of the ACBM to an EPA approved landfill must be accomplished by an approved and Texas Department of Health licensed asbestos transporting company. The asbestos shall be properly labeled. It is the Contractor's responsibility to ensure that the ACBM reaches the approved landfill in an acceptable condition. Final disposal of asbestos-containing waste material shall be within 30 days of the project completion or when receiving container is full, whichever is sooner.

F. No later than thirty (30) days after completion of the ACBM removal, the Contractor shall furnish CONSULTANT three (3) copies of project documentation which shall include at a minimum, waste shipment records (manifest), employee physicals, employee respirator clearances, employee certificates of understanding regarding the handling of asbestos, typed daily project details, notifications, insurance certificates, SDS sheets, and all other relevant documents as determined by CONSULTANT.

Wade Champion
License No. 10-5410
Expires 08/25/2025

TECHNICAL SPECIFICATION USE AND RELIANCE

The technical specifications presented herein are an instrument of professional service developed by Champion Environmental Consulting, Inc. (CEC) in contemplation of a wide array of project-specific variables, including how the documents will be used, by whom and under what project management scheme. Because CEC may be liable for the adequacy of these technical specifications and any unauthorized reuse could result in misuse of CEC's findings, recommendations or other service elements for which CEC cannot anticipate risk and liability, use of these technical specifications (including reliance, duplication, copying, quoting or excerpting) is limited to CEC, as project manager of the above-referenced project for the client named herein. Any other party, including contractors or consultants, wishing to use, rely upon, excerpt, copy, duplicate or otherwise reproduce these specifications must apply to CEC for written authorization to do so with such approval in the sole discretion of CEC.

Wade Champion
License No. 10-5410
Expires 08/25/2025

APPENDIX A
LICENSES

Texas Department of State Health Services

CHAMPION ENVIRONMENTAL CONSULTING INC

is certified to perform as an

Asbestos Consultant Agency

in the State of Texas and is hereby governed by the rights, privileges and responsibilities set forth in Texas Occupations Code, Chapter 1954 and Title 12, Texas Administrative Code, Chapter 295 relating to Texas Asbestos Health Protection, as long as this license is not suspended or revoked.

License Number: 100522

Expiration Date: 04/01/2025

Jennifer Shuford, MD, MPH, Commissioner of Health

Control Number: 97564

(Void After Expiration Date)

VOID IF ALTERED - NON-TRANSFERABLE

SEE BACK

Texas Department of State Health Services

CHAMPION ENVIRONMENTAL CONSULTING INC

is certified to perform as an

Asbestos Laboratory

PCM

in the State of Texas and is hereby governed by the rights, privileges and responsibilities set forth in Texas Occupations Code, Chapter 1954 and Title 12, Texas Administrative Code, Chapter 295 relating to Texas Asbestos Health Protection, as long as this license is not suspended or revoked.

License Number: 300450

Expiration Date: 06/14/2025

Jennifer Shuford, MD, MPH, Commissioner of Health

Control Number: 96744

(Void After Expiration Date)

VOID IF ALTERED - NON-TRANSFERABLE

SEE BACK

Texas Department of State Health Services

Asbestos Individual Consultant

WADE E CHAMPION

License No. 105410

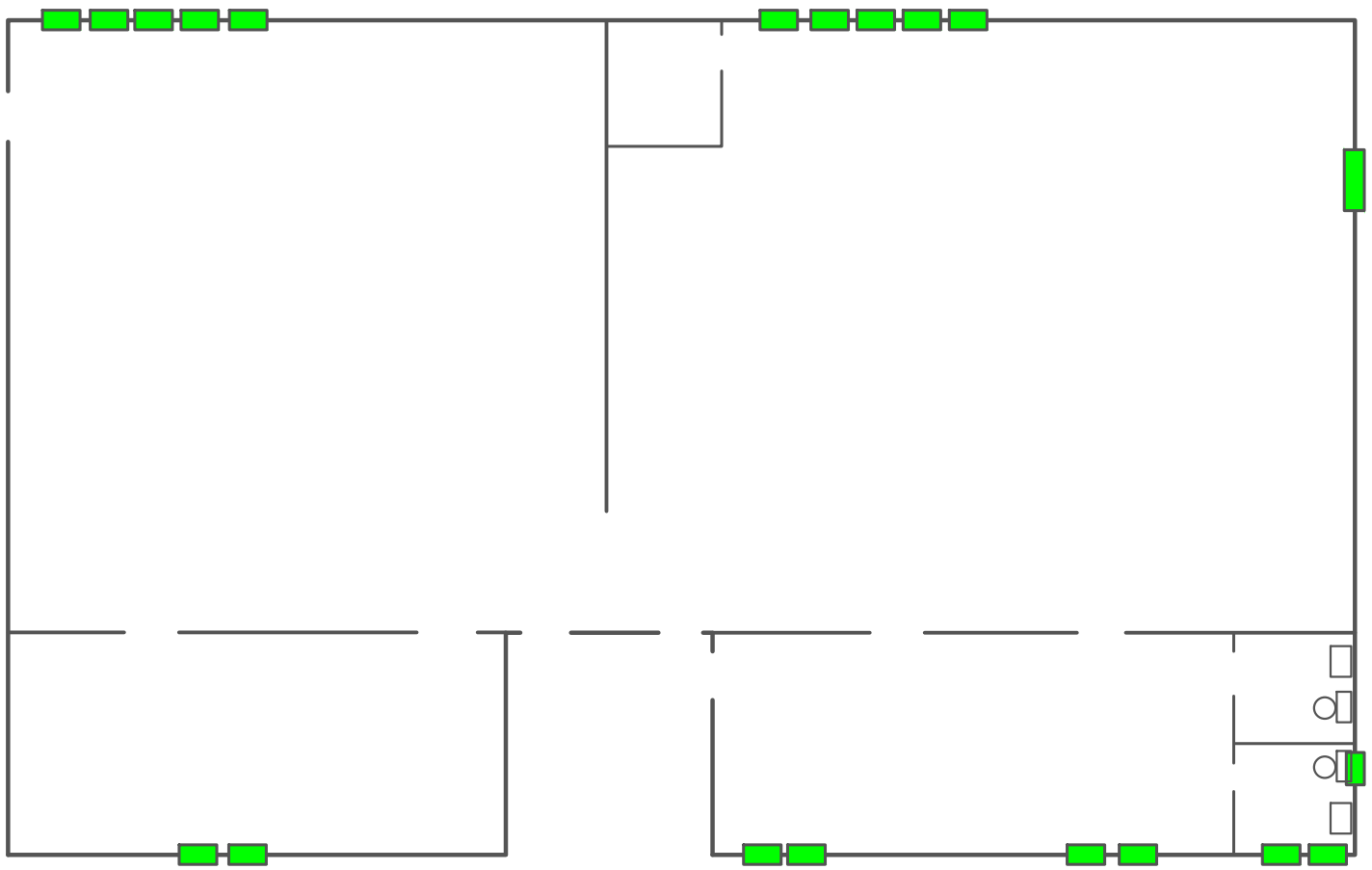
Control No. 98246

Expiration Date: 25-Aug-2025

APPENDIX B
NOTIFICATION(S)

(As Submitted By Licensed Abatement Contractor)

APPENDIX C
REFERENCE DRAWING(S)



Exterior Window Glazing (~29 Windows)
Remove and dispose of sashes only
Frames to remain in place for LBP removal

INDIVIDUAL ASBESTOS CONSULTANT TDH LICENSE NO. 10-5410 TEXAS DEPARTMENT OF HEALTH

Wade Champion
Asbestos Individual Consultant
TDSHS License No. 10-5410
Expiration Date 8/25/2025

CHAMPION environmental consulting
109 West 7th Street
Suite 210
Georgetown, Texas 78626

CLIENT:
CITY OF DRIPPING SPRINGS

511 Mercer Street
Cripping Springs, Texas 78620

SITE: STEPHENSON BUILDING
101 Old Fitzhugh Road
Dripping Springs, Texas 78620

C-ECI Project No. 23-1730
By: N Hackney
Approved By: W Champion
Submitted: 4/4/2024
Not To Scale

Asbestos Abatement Plan

Figure 1

LEAD PAINT REMOVAL WORKPLAN

Stephenson Building
101 Old Fitzhugh Road
Dripping Springs, Texas 78620

October 18, 2024

Project No. 23-1730

Prepared for:
City of Dripping Springs
511 Mercer Street
Dripping Springs, Texas 78620

And

Architexas
1023 Springdale Rd., Bldg. 11, Suite E
Austin, Texas 78721

Prepared by:

Wade Champion
Project Manager
TDLR Lead Inspector/Risk Assessor 2070357

LEAD BASED PAINT WORKPLAN

DIVISION 1 – GENERAL REQUIREMENTS

01014 Summary of the Work

DIVISION 2 – SITE WORK

Section 02064 - Removal of Lead-Based Paint Substrates

Section 02065 - Removal of Loose and Flaking Lead-Based Paint

Section 02066 - Chemical Stripping of Lead-Based Paint

Section 02067 - Disposal of Lead-Based Paint Waste Material

SECTION 01014 - SUMMARY OF THE WORK

PART 1 - GENERAL

The project name is "**Stephenson Building** Renovation Areas Lead Based Paint Workplan" as shown on the Contract Documents prepared by Owner. The workplan is dated **October 18, 2024**

All phases of the Work shall be executed by skilled craftsmen experienced in their respective trades. This section includes a general scope of work, while Division 2 includes a description of procedures for work procedures in each work area.

1.1 RELATED DOCUMENTS

General provisions of the Contract, including the General and Supplementary Conditions and other Division 1 General Requirements, apply to work of this section. Additional sections include:

Division 2 - Site Work

Section 02064 - Removal of Lead-Based Paint Substrates
Section 02065 - Removal of Loose and Flaking Lead-Based Paint
Section 02066 - Chemical Stripping of Lead-Based Paint
Section 02067 - Disposal of Lead-Based Paint Waste Material

1.2 SUMMARY OF WORK

The Work includes the removal or partial removal of lead-based paint or lead-based paint substrates identified in the designated areas of the Project which include.

Refer to the guidance herein: Work consists of stripping LBP from painted substrates.

Room/ Location	Substrate	Location	Approx. Quantity
Exterior	Shiplap Ceiling White Wood	East Side Main Entrance	120 SF
Exterior	Door Frames Brown Wood	East Side Main Entrance	3 Door Frames
Interior	Window Frames Multi Colors Wood	Room A, B, D, East Side Restroom and Room C West Wall	29 Windows
Interior	Front of Stage Green Wood	Room C	70 SF

The Work at the project shall commence on the date established by the Notice to Proceed and shall be completed within the time specified on the proposal form. The Work shall be performed in accordance with the requirements of all applicable sections of these Workplans. Contractor shall perform the Work in a manner that minimizes disruption to construction operations.

The Work includes the removal and disposal of lead-based paint, lead-based paint contaminated building materials according to the requirements of the following workplan sections in the sequence indicated:

Work:

Contractor will comply with applicable Codes, Regulations, and Standards. governmental agencies before start of work.

Contractor will provide Air Monitoring - Test Laboratory Services to demonstrate to the Owner so that the building areas beyond the work areas will remain uncontaminated. Air monitoring to determine required respiratory protection is the responsibility of Contractor.

Contractor will provide Worker Protection. Contractor will provide the equipment and procedures for protecting workers against lead contamination and other workplace hazards.

Work Procedures:

Section 02064 - Removal of Lead-Based Paint Substrates
Section 02065 - Removal of Loose and Flaking Lead-Based Paint
Section 02066 - Chemical Stripping of Lead-Based Paint
Section 02067 - Disposal of Lead-Based Paint Waste Material

1.3 WORK PLAN

Submit detailed plans of the procedures proposed for use in complying with the requirements of these Workplans. Include in the plans the locations and layouts of decontamination areas; the sequencing of lead work; the interface of trades involved in the performance of work; methods to be used to assure the safety of building occupants and visitors to the site; the disposal plan, including location of approved disposal site; and a detailed description of the methods to be employed to control pollution. Expand upon the use of the portable high-efficiency particulate air (HEPA) ventilation system, closing out of the building's heating, ventilation, and air conditioning (HVAC) system, method of removal to prevent visible emissions in work areas, and bagging of removed lead debris. The plan must be approved by the Consultant prior to commencement of work.

1.4 INSPECTION

Prior to commencement of work, inspect areas in which work will be performed. List damage to structure, surfaces, equipment, or surrounding properties noted during the inspection that could be misconstrued as damage resulting from the Work. Submit to Consultant prior to starting work.

1.5 POTENTIAL LEAD HAZARD

The disturbance or dislocation of lead-based painted materials may cause lead dust to be released into the building's atmosphere, thereby creating a potential health hazard to workers and building occupants. Apprise all workers, supervisory personnel, subcontractors and consultants who will be at the job site of the seriousness of the hazard and of proper work procedures, which must be followed.

Where in the performance of the work, workers, supervisory personnel, subcontractors, or consultants may encounter, disturb, or otherwise function in the immediate vicinity of any identified lead-based paint, take appropriate continuous measures as necessary to protect all building occupants from the potential hazard of exposure to lead dust. Such measures shall

include the procedures and methods described herein, and compliance with regulations and guidelines of applicable federal, state, and local agencies.

1.6 STOP WORK

If Owner or Consultant presents a written Stop Work Order, immediately and automatically stop all work. Do not re-commence work until authorized by Consultant.

1.7 CONTRACTOR USE OF PREMISES

Limit use of the premises to the Work indicated, so as to allow for Owner occupancy and use by other trades required in the buildings. Confine operations at the site to the areas permitted under the Contract.

Portions of the site beyond areas on which work is indicated are not to be disturbed. Conform to site rules and regulations affecting the Work while engaged in project construction.

Keep existing driveways and entrances serving the premises clear and available to Owner and his employees at all times. Do not use these areas for parking or storage of materials.

Do not encumber the site with materials or equipment. Confine stockpiling of materials and location of storage sheds to the areas designated by Owner. If additional storage is necessary, obtain and pay for such storage off-site.

Lock automotive-type vehicles, such as passenger cars and trucks, and other mechanized or motorized construction equipment, when parked and unattended, so as to prevent unauthorized use. Do not leave such vehicles or equipment unattended with the motor running or the ignition key in place or accessible to unauthorized persons.

Maintain existing buildings in a safe and weather tight condition throughout the construction period. Repair damage caused by construction operations. Take all precautions necessary to protect the buildings and their occupants during the construction period.

Keep public areas such as hallways, stairs, elevator lobbies, and toilet rooms free from accumulation of waste, rubbish, or construction debris.

Smoking or open fires will not be permitted within any of the buildings on the premises.

Except for toilet rooms designated by Owner for use by Contractor's personnel, use of existing toilets within the buildings, by Contractor and his personnel, will not be permitted.

1.8 LOADS AND STRESSES

Contractor shall have full responsibility for preventing overstresses of any structure or any part or member of the structure during the Work. Contractor shall fully check the effect of the operation in this regard and shall provide all support necessary.

1.9 VERIFICATION OF QUANTITIES

It is the responsibility of Contractor to verify all LBP locations and quantities of LBP in each work area. Contractor shall fully inform himself of the conditions relating to construction of the Work and employment of labor thereon. Failure to do so will not relieve a successful Offeror of his

obligation to furnish all material, equipment, and labor necessary to carry out the provisions of the Contract.

1.10 OWNER OCCUPANCY

Separate Contract: Owner has been awarded a separate contract for performance of certain construction operations at the site. Those operations will be conducted simultaneously with work under this Contract and Contractor shall work in cooperation with the other trades performing said operations.

Owner reserves the right to place and install equipment as necessary in areas of the building in which all lead removal and project decontamination procedures have been completed and to occupy such completed areas prior to substantial completion, provided that such occupancy does not substantially interfere with completion of the Work. Such placing of equipment and partial occupancy shall not constitute acceptance of the Work or any part of the Work.

1.11 SUBMITTALS

Submit all required documents, identified in Section 01301 - Submittals, to Consultant for review prior to the start of work in any given work area. Do not begin work until these submittals are returned, approved by Owner and Consultant.

1.12 PROJECT SCHEDULE

The project is scheduled to begin on the date established in the Notice to Proceed and shall be completed as specified on the Proposal Form and in these Contract Documents. Contractor shall submit his work schedule to the Owner for approval. Work schedule shall be coordinated based on the availability of the work area and whether or not the building is occupied. Work hours will initially be scheduled as outlined in paragraph 1.2 of this Section.

Removal of lead-containing waste material from temporary storage inside containment to waste dumpsters shall be approved by the Owner or shall be conducted as otherwise specifically approved in writing. During transportation of all waste materials, the lead bags, dumpsters, and warning labels will be visually obscured from public view.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01014

SECTION 02064 - REMOVAL OF LEAD-BASED PAINTED SUBSTRATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS:

Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division-1 Workplan sections, apply to work of this section.

1.2 SUMMARY OF WORK

Work of this section includes the removal and off-site disposal of the following lead-based painted substrates

Not Applicable: components coated with LBP will be chemically stripped and prepared for repainting per section 02066

1.3. EXISTING CONDITIONS

Existing conditions are reflected accurately to the best of Owner's knowledge. Should minor conditions be encountered that are not exactly as indicated, modification to the Work shall be made as required at no additional expense to Owner. Contractor is responsible for thoroughly familiarizing himself with all conditions and requirements of the Work, including Lead-Based Paint (LBP) locations and quantities, prior to submittal of a Proposal. Contractor shall refer to the attached tables, hereby listed in Appendix B of the Contract Documents for assistance in identifying LBP locations.

PART 2 - PRODUCTS

2.1 DISPOSAL BAGS/PLASTIC SHEETING

Provide 6 mil polyethylene disposal bags or wrap substrates to be disposed of in 6-mil polyethylene, sealed with duct tape.

2.2 WET DETERGENT WASH

Provide detergent with a high phosphate content (at least 5%) trisodium phosphate (TSP). Follow dilution ratio recommended by the manufacturer's instructions.

Wet Detergent Wash: Provide detergent or cleaning agent formulated to be effective in removing lead dust. Follow dilution ratio recommended by the manufacturer's instructions.

PART 3 - EXECUTION

Prior to initiating Work, Contractor shall ensure compliance with Section 01555 - Worker Protection - Lead Based Paint

3.1 SECURING WORK AREA:

Secure work area from access by occupants, staff or users of the building. Accomplish this where possible, by locking doors, windows, or other means of access to the area.

3.2 DEMARCATION OF REGULATED AREA:

Demarcate each exterior regulated area with a sheet plastic drop sheet and barricade fence. Provide barricade fence with support posts four feet (4') on center. Provide barrier-warning tape at perimeter with the following legend "Caution Lead Hazard - Do Not Enter Work Area Unless Authorized." Barricade fence shall be securely fastened and no closer than twelve feet (12') radius from the work.

3.3 EXTERIOR RENOVATION GENERAL PROCEDURES

The following precautions and procedures have application to the work of this section. Workers must exercise caution to avoid the release of lead dust into the air and to contain lead dust and debris on drop sheet.

Before start of work comply with requirement for worker protection and respiratory requirements as specified in the Contract Documents.

Do not allow eating, drinking, smoking, chewing tobacco or gum, or applying cosmetics in the regulated area.

Provide one layer of 6-mil polyethylene sheeting as close to foundation as possible. Extend the sheeting out from the foundation a distance of 3 feet per story being abated or a minimum of 6 feet and a maximum of 15 feet. Weight the sheeting at the foundation and along edges and seams. Erect vertical shrouds or suspend work if constant wind speed exceeds 20 mph or there is visible movement of debris beyond ground sheeting.

On a daily basis, collect dust and debris by HEPA vacuuming the surface and by wet sweeping. At the end of each workday, remove polyethylene sheeting and place in 6 mil disposal bags. Visually examine the immediate area to ensure that no lead debris has escaped containment. Wet sweep or rake up any debris found and place in 6 mil disposal bags. Securely store with other waste.

Suspend work activities during inclement weather; including but not limited to rain, snow, ice, and hail.

3.4 GENERAL

Score paint at edges, corners etc. to reduce chipping of paint. Carefully remove by wet scraping loose and flaking paint prior to removal of substrate in accordance with the following procedure:

- Fine mist the painted surface with wet wash detergent or water using plant mister or garden sprayer and carefully scrape loose and flaking material.
- Clean up paint chips and flakes by HEPA vacuuming or wet wiping with wet towels. Care shall be taken to avoid damage to adjacent areas during the removal of substrates.
- Using wet-demolition techniques, remove substrate from building framing or structural members by tooling the substrate from the structural members. Substrates coated with LBP

shall be kept wet at all times during the removal, cleanup, and containerizing of the substrates. Under no circumstances shall the contractor let the removed substrate drop more than six feet from its location to the floor or ground.

- Carefully remove the lead based painted substrates to minimize the disturbance of lead-based paint and the generation of lead dust.
- HEPA vacuum and/or wet wipe to remove all paint chips, debris and dust generated during the work. Do not allow dust or debris to accumulate.
- Substrates that are removed shall be wrapped, labeled and disposed of or disposed of in accordance with section 02067 - Disposal of Waste Materials - Lead-Based-Paint.

END OF SECTION 02064

SECTION 02065 - REMOVAL OF LOOSE AND FLAKING LEAD-BASED PAINT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS:

General provisions of the Contract, including General and Supplementary Conditions and other Division-1 Workplan sections, apply to work of this section.

1.2 SUMMARY OF WORK

Work of this section includes the removal and off-site disposal of lead-based paint from the following substrates.

Not Applicable: components coated with LBP will be chemically stripped and prepared for repainting per section 02066

The Architect/ Engineer or their designated representative, will be responsible for final inspection on completeness of preparation of the work surface

PART 2 - PRODUCTS

2.1 DISPOSAL BAGS/PLASTIC SHEETING: Provide 6 mil polyethylene disposal bags or wrap substrates to be disposed of in 6-mil polyethylene, sealed with duct tape.

2.2 Wet Detergent Wash: Provide detergent with a high phosphate content (at least 5%) trisodium phosphate (TSP). Follow dilution ratio recommended by the manufacturer's instructions.

PART 3 - EXECUTION

3.1 GENERAL

Carefully remove by wet scraping and/or sanding all loose and flaking paint in accordance with the procedures set forth in this section.

3.2 CRITICAL BARRIERS

Remove all removable furniture that has been designated uncontaminated by the Work Procedures or Consultant's Project Manager. Also remove uncontaminated equipment and/or supplies from the work area before commencing work, or completely cover with two (2) layers of polyethylene sheet at least 6 mil in thickness, securely taped in place with duct tape. Such furniture and equipment shall be considered outside the work area unless covering plastic or seal is breached.

Completely separate the work area from other portions of the building and the outside environment by closing all openings with sheet plastic barriers at least 6 mil in thickness or by sealing cracks with spray-foam, poly sheeting, and/or duct tape.

Individually seal all ventilation openings (supply and exhaust), lighting fixtures, clocks, doorways, windows, convector casings, spandrel panels, and speakers, and other openings into the work area polyethylene sheeting at least 6 mil in thickness, taped securely in place with duct tape. Maintain seal until all work, including project decontamination, is completed. Take care in sealing off lighting fixtures to avoid melting or burning the sheeting.

Clean all contaminated furniture, equipment, and/or supplies, prior to moving or covering, with a HEPA-filtered vacuum cleaner or by wet cleaning. All equipment or furniture is to be deemed contaminated unless specifically declared uncontaminated in writing by Consultant's Project Manager. Clean all surfaces in the work area with a HEPA-filtered vacuum or by wet wiping prior to installing the primary barrier.

Provide sheet plastic barriers at least 6 mil in thickness as required to completely seal openings from the work area into adjacent areas. Seal the perimeter of all sheet plastic barriers with duct tape or spray cement. Erect the entire assembly so that it hangs vertically without a "shelf" upon which debris could collect.

Provide a pressure differential system per Title 0900, Section 01513 - Temporary Pressure Differential and Air Circulation System.

3.3 PRIMARY BARRIER

Cover floors and other building surfaces not scheduled for removal with a primary barrier, as described below to protect these surfaces from water damage and high humidity and from contamination by lead dust.

Cover the floor of the work area with two individual layers of clear polyethylene sheeting, each at least 6 mil in thickness, lapped up on the walls at least 12 inches. Plastic shall be sized to minimize seams.

Form a sharp right-angle bend at the juncture of floor and wall so that there is no area of the sheeting that, if stepped on, would cause the wall attachment to be pulled loose.

3.4 SECONDARY BARRIER

Install as a drop cloth, a clear 6-mil sheet plastic in all areas where LBP removal work is to be carried out. Completely cover the floor with sheet plastic. Secure the sheet plastic in place with duct tape so that debris cannot filter behind it. Provide cross-strips of duct tape at the floor supports as necessary to support the sheet plastic and prevent its displacement during removal operations.

Install the secondary barrier at the beginning of each work shift. Install only sufficient plastic for work of that shift. Remove the secondary barrier at the end of each work shift or as work in an area is completed. Fold the plastic toward the center of the sheet and pack into disposal bags. Keep the material on the sheet continually wet until bagged.

3.5 REMOVAL OF LOOSE AND FLAKING PAINT

Apply a fine mist surface with wet wash detergent using plant mister or garden sprayer. Score the damaged paint at edges and corners to reduce chipping of paint. Carefully scrape loose and flaking material.

Where identified in the Reference Drawings, wet sanding will be required to prepare the substrate for repainting. Lightly sand with a moist sanding sponge or wet sandpaper to obtain a smooth transition edge between the remaining paint and the substrate.

HEPA vacuum and/or wet wipe to remove all paint chips, debris and dust generated during the work. Do not allow dust or debris to accumulate. Clean up paint chips and flakes by wet sweeping, HEPA vacuuming, or collecting in wet towels. Care shall be taken to avoid damage to adjacent areas during the removal of the loose and flaking paints.

At the end of each work shift, remove any paint chips, dust, and debris that collects on the sheeting and other surfaces by using a HEPA vacuum and by spraying with wet wash solution, collect debris with wet paper towels, place in disposal bags while still wet, and clean surface of sheeting and surfaces with wet cloths.

Empty HEPA vacuum and place contents into disposal bags. Place all rags, wet towels, and other disposable items used during the project into disposal bags. Tape the disposal bags shut with duct tape and wet wipe the exterior surfaces of all disposal bags and place in 55-gallon drums prior to exiting the work areas.

At the completion of work activities in each work area, wet wipe all surfaces, including floor sheeting with a wet detergent wash. Provide detergent with a high phosphate content (at least 5%) trisodium phosphate (TSP). Follow dilution ratio recommended by the manufacturer's instructions.

3.6 PRIMING AND SEALING

After complete drying, prepare the substrate and seal all surfaces where the loose and flaking lead-based paint was removed with a primer or encapsulant that is compatible with the substrate.

3.7 DAMAGES

Protect areas adjacent to substrates that are removed for replacement from damage caused by this work. Damages to non-protected areas or from lack of care shall be repaired or replaced at the Contractor's expense.

END OF SECTION 02065

SECTION 02066 - CHEMICAL STRIPPING OF LEAD-BASED PAINT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS:

Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division-1 Workplan sections, apply to work of this section.

1.2 GENERAL

The following is a list of prohibited lead hazard removal methods:

- Open flame burning;
- Chemical stripping with methylene chloride-based paint strippers;
- Uncontained abrasive blasting;
- Uncontained power washing;
- Dry sanding or scraping;
- Power sanding;
- Sanding of wood after chemical stripping.

1.3 SUMMARY OF WORK

Work of this section includes the removal and off-site disposal of lead-based paint from the following substrates.

Room/ Location	Substrate	Location	Approx. Quantity
Exterior	Shiplap Ceiling White Wood	East Side Main Entrance	120 SF
Exterior	Door Frames Brown Wood	East Side Main Entrance	3 Door Frames
Interior	Window Frames Multi Colors Wood	Room A, B, D, East Side Restroom and Room C West Wall	29 Windows
Interior	Front of Stage Green Wood	Room C	70 SF

NOTE: LBP Remediation will be conducted in conjunction with asbestos abatement activities. If a conflict between the asbestos and LBP guidance occurs, the more stringent will be followed.

1.4 SUBMITTALS

Before start of work: Submit the following to the Consultant for review. Do not start work until these submittals are returned with Consultant approval indicating that the submittal is returned for unrestricted use.

1.4.1 Chemical Stripping Removers and Neutralizers

Submit product data, use instructions and recommendations from manufacturer for use intended. Include data substantiating that material complies with requirements.

1.4.2 Material Safety Data Sheet

Submit material safety data sheet, or equivalent, in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) for each chemical stripper and neutralizer, include a separate attachment for each sheet indicating the specific worker protective equipment proposed for use with the material indicated.

PART 2 - PRODUCTS

2.1 Chemical Stripping Removers

Shall contain no methylene chloride products. Chemical removers shall be compatible with, and not harmful to, the substrate to which they are applied. The contractor shall comply with the manufacturer's recommendations for use of the product supplied.

2.2 Chemical Stripping Agent Neutralizer

Provide chemical agent neutralizer in accordance with manufacturer's recommendations. Neutralizers shall be compatible with and not harmful to the substrate. Neutralizers shall also be compatible with the stripping agent used.

2.3 Wet Detergent Wash

Provide detergent with a high phosphate content (at least 5%) trisodium phosphate (TSP). Follow dilution ratio recommended by the manufacturer's instructions.

PART 3 - EXECUTION

3.1 CHEMICAL LEAD-BASED PAINT REMOVAL ON-SITE

Chemical Stripping Agents and neutralizers shall be applied in accordance with the recommendations of the manufacturer.

3.2 Caustic Stripper Neutralization

Caustic strippers shall be neutralized in accordance with manufacturer's recommendations. Provide workers with proper protective equipment, including but not limited to; protective clothing (non-paper), chemically resistant gloves, eye protection and respiratory protection with filters selected for the hazards to be encountered.

3.3 Remove Stripper Sludge

Place lead containing stripper sludge in corrosion-proof containers and place in a secure waste storage area. The surface from which lead-based paint has been removed shall be thoroughly scrubbed, while still damp from the stripper, in accordance with the manufacturer's recommendation. Monitor pH of the neutralizing solution to ensure it has not become neutralized in the process. If the pH exceeds 6.5, or the solution becomes overly soiled, change solution. Solution may be classified as hazardous waste. Place in 55-gallon drums and test in accordance with Section 02067- Disposal of Waste Materials - Lead-Based Paint. The surface shall be tested with litmus paper following this process. If the litmus paper turns pink, the acid has effectively neutralized the alkali. If litmus turns blue continue scrubbing until satisfactory results are achieved.

3.4 Final Cleaning Of Surfaces

Prepare wet detergent wash. Workers must wear eye shields and chemically resistant gloves when working with this solution. Thoroughly scrub stripped surface to remove as much remaining lead residue as possible. The wash solution may also be hazardous waste, treat in accordance with Section 02067- Disposal of Waste Materials - Lead-Based Paint. Following wet detergent wash, perform a final wash with clear water to remove any traces of detergent. Sponges used in the clean-up process may not be reused and must be placed in double 4 mil or single 6 mil plastic bags, which will be sealed, labeled, and placed in the secure waste storage area. Surfaces must be allowed to dry thoroughly before repainting. A grayish film indicates that significant lead residues remain, and the cleaning process must be repeated. If a white powder appears, the surface is Alkaline and requires further neutralization.

3.4 Painting and Sealing

After complete drying, prepare the substrate and seal all surfaces where lead-based paint was removed with a primer or encapsulant that is compatible with the substrate.

END OF SECTION 02066

SECTION 02067 - DISPOSAL OF WASTE MATERIALS - LEAD-BASED PAINT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Workplan Sections, apply to work of this section.

1.2 DESCRIPTION OF THE WORK

This section describes the disposal of lead-containing or lead contaminated waste materials. Disposal includes packaging of waste materials.

1.3 SUBMITTALS:

Before the start of work, Contractor shall submit the following to the Owner's Consultant for review. Do not start work until these submittals are returned with Owner's Consultant action stamp indicating that the submittal is returned for unrestricted use.

- Contractor must ascertain that the facility owner is registered with the U.S. EPA as a generator of hazardous waste. If there is no generator status established, the contractor shall assist the owner in obtaining generator identification numbers.
- Copy of state or local license for waste hauler.
- U.S. EPA identification number of waste hauler.
- Name and address of waste disposal facility where hazardous waste materials are to be disposed. Include contact person and telephone number. Copy of state license and permit. Provide disposal facility permits.
- Copy of EPA "uniform hazardous waste manifest" form.
- Copy of EPA "notification of hazardous waste activity" form.
- Copy of forms required by state or local agencies.
- Sample disposal bag and labels to be used.

Submit copies of all manifests and disposal site receipts to Owner's Consultant

PART 2 - PRODUCTS

Disposal Bags: Provide 6 mil thick leak tight polyethylene bags or wrap components in 6 mil polyethylene sheeting and seal with duct tape. "Label with specific Hazardous Waste Label:"

For wrapped materials provide stick-on labels.

PART 3 - EXECUTION

3.1 GENERAL

All lead-based paint and lead-contaminated paint shall be treated as hazardous waste unless testing identifies the waste stream otherwise:

It shall be the responsibility of the Contractor to have each waste stream evaluated for determination of hazardous waste. Testing of waste shall be performed by a laboratory accredited by either the American Industrial Hygiene Association (AIHA) or the American Association of Laboratory Accreditation (AALA) retained by the contractor. Contractor shall include the cost of testing in the contract sum and supply all test results to the owner.

Sample analysis of each waste stream generated at the Site be performed by a qualified laboratory for Toxicity Characteristic Leaching Procedure (TCLP). The contractor shall pay for all samples obtained at the site for his use.

Waste steams tested that results in a lead content in the TCLP of greater than or equal to five parts per million (5ppm) is to be considered hazardous and shall be handled and disposed according to local, city, state, and federal regulations.

Place all waste generated during the project in a minimum of a single 6-mil disposal bags (or wrap in 6-mil polyethylene sheeting), place bag in DOT Approved 55-gallon steel drum and store in the designated storage area or in an enclosed dumpster.

Properly store and secure waste at all times. Do not leave debris in uncovered or unlocked trucks or dumpsters. Do not incinerate debris or use an unauthorized dumpster. Do not introduce lead contaminated water into storm or sanitary sewers. Do not permit recycling of building components coated with Lead-Based Paint.

3.2 DISPOSAL OF HAZARDOUS LIQUID OR SOLID WASTES

Comply with RCRA, DOT, STATE, and local regulations. Comply with DOT and STATE regulations for containers. The most stringent regulation shall apply.

Apply for an EPA identification number from the appropriate regional office if more than 100 kg of hazardous waste is generated from the lead hazard reduction process during any calendar month.

All waste is to be hauled by a licensed waste hauler with all required licenses from all state and local authorities with jurisdiction. Load all waste material into properly labeled disposal bags, polyethylene sheeting and leak-tight drums. All materials are to be contained as follows:

- One 6 mil layer of sheet polyethylene (duct tape all seams) or One 6 mil disposal bag; and
- Sealed steel drum

Protect interior of truck or dumpster with two layers of 6 mil polyethylene sheeting with all seams sealed with duct tape.

Carefully load containerized waste in fully enclosed dumpsters, trucks or other appropriate vehicles for transport. Exercise care before and during transport, to ensure that no unauthorized persons have access to the material.

Do not store containerized materials outside of the Work Area. Take containers from the Work Area directly to the designated storage area, sealed truck, or dumpster,

Retain all documents from the disposal or treatment facility. At completion of hauling and disposal of each load submit copy of Uniform Hazardous Waste Manifest, to Owner's Project Monitor.

3.5 BACKCHARGES

Where Contractor fails to fulfill packaging, handling, or disposal requirements as outlined herein, Owner will charge back to Contractor all costs associated with insuring that hazardous wastes are packaged and segregated in accordance with EPA and DOT regulations.

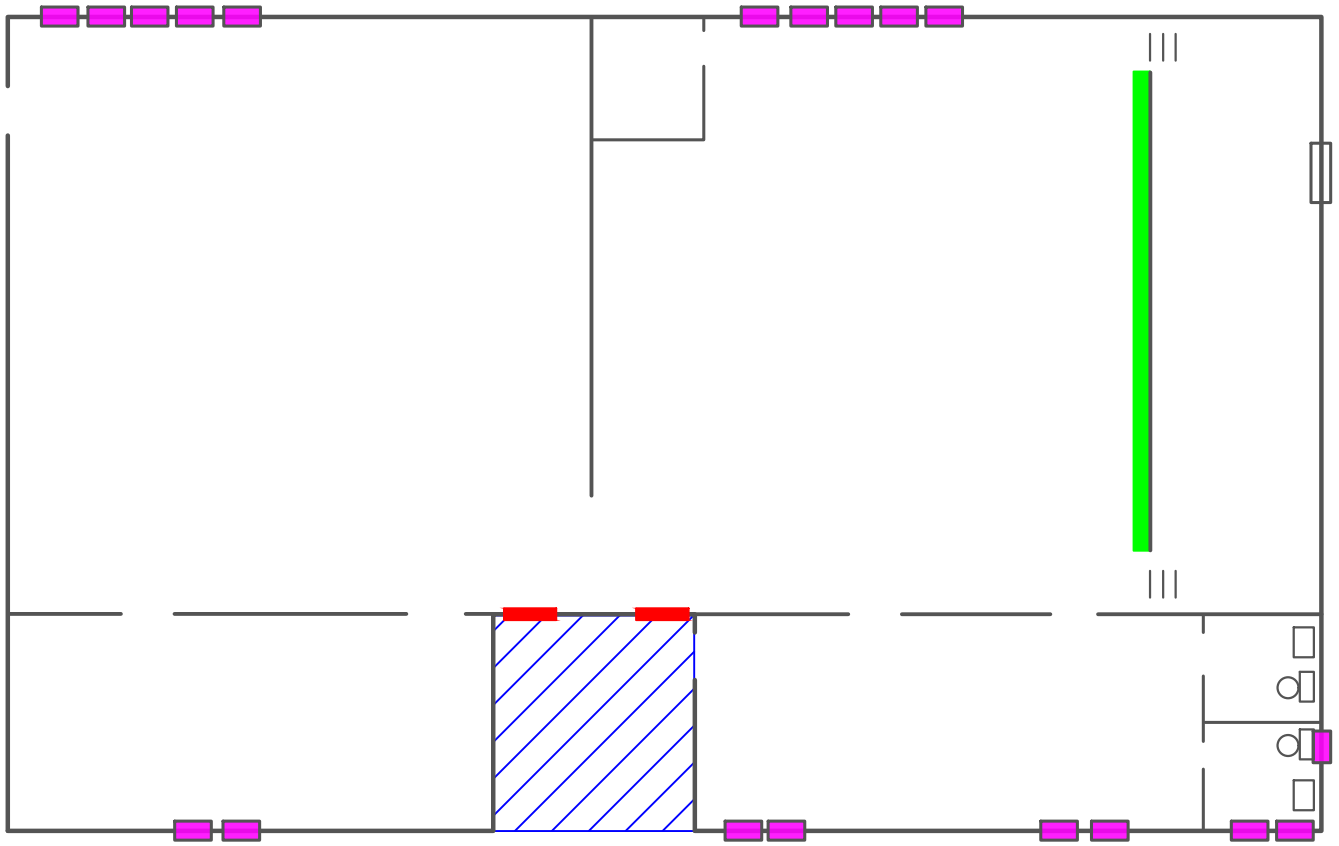
Environmental pollution of Owner's property resulting from Contractor's hazardous waste management activities shall be promptly remediated under Owner direction, to the Owner's sole satisfaction, and at the Contractor's sole expense.

Contractor agrees to either reimburse the Owner or reduce the Contract amount by change order to cover all costs associated with waste repackaging, waste re-segregation, or pollution remediation efforts.

END OF SECTION - 02067

APPENDIX A

REFERENCE DRAWING



Exterior Shiplap Ceiling Wood, White (~120 SQ FT)
Front of Stage Wood Paint, Green (~70 SQ FT)
Interior Wood Window Frames, Multi-colored (~29 Windows)
Exterior Wood Door Frames, Brown (~3 EA)

CHAMPION environmental consulting
109 West 7th Street
Suite 210
Georgetown, Texas 78626

CLIENT:
CITY OF DRIPPING SPRINGS

511 Mercer Street
Cripping Springs, Texas 78620

SITE: STEPHENSON BUILDING
101 Old Fitzhugh Road
Dripping Springs, Texas 78620

C-ECI Project No. 23-1730
By: N Hackney
Approved By: W Champion
Submitted: 4/4/2024
Not To Scale

Lead-Based Paint Location Plan

Figure 1

LEAD PAINT REMOVAL WORKPLAN

Stephenson Building
101 Old Fitzhugh Road
Dripping Springs, Texas 78620

October 18, 2024

Project No. 23-1730

Prepared for:
City of Dripping Springs
511 Mercer Street
Dripping Springs, Texas 78620

And

Architexas
1023 Springdale Rd., Bldg. 11, Suite E
Austin, Texas 78721

Prepared by:

Wade Champion
Project Manager
TDLR Lead Inspector/Risk Assessor 2070357

LEAD BASED PAINT WORKPLAN

DIVISION 1 – GENERAL REQUIREMENTS

01014 Summary of the Work

DIVISION 2 – SITE WORK

Section 02064 - Removal of Lead-Based Paint Substrates

Section 02065 - Removal of Loose and Flaking Lead-Based Paint

Section 02066 - Chemical Stripping of Lead-Based Paint

Section 02067 - Disposal of Lead-Based Paint Waste Material

SECTION 01014 - SUMMARY OF THE WORK

PART 1 - GENERAL

The project name is "**Stephenson Building** Renovation Areas Lead Based Paint Workplan" as shown on the Contract Documents prepared by Owner. The workplan is dated **October 18, 2024**

All phases of the Work shall be executed by skilled craftsmen experienced in their respective trades. This section includes a general scope of work, while Division 2 includes a description of procedures for work procedures in each work area.

1.1 RELATED DOCUMENTS

General provisions of the Contract, including the General and Supplementary Conditions and other Division 1 General Requirements, apply to work of this section. Additional sections include:

Division 2 - Site Work

Section 02064 - Removal of Lead-Based Paint Substrates
Section 02065 - Removal of Loose and Flaking Lead-Based Paint
Section 02066 - Chemical Stripping of Lead-Based Paint
Section 02067 - Disposal of Lead-Based Paint Waste Material

1.2 SUMMARY OF WORK

The Work includes the removal or partial removal of lead-based paint or lead-based paint substrates identified in the designated areas of the Project which include.

Refer to the guidance herein: Work consists of stripping LBP from painted substrates.

Room/ Location	Substrate	Location	Approx. Quantity
Exterior	Shiplap Ceiling White Wood	East Side Main Entrance	120 SF
Exterior	Door Frames Brown Wood	East Side Main Entrance	3 Door Frames
Interior	Window Frames Multi Colors Wood	Room A, B, D, East Side Restroom and Room C West Wall	29 Windows
Interior	Front of Stage Green Wood	Room C	70 SF

The Work at the project shall commence on the date established by the Notice to Proceed and shall be completed within the time specified on the proposal form. The Work shall be performed in accordance with the requirements of all applicable sections of these Workplans. Contractor shall perform the Work in a manner that minimizes disruption to construction operations.

The Work includes the removal and disposal of lead-based paint, lead-based paint contaminated building materials according to the requirements of the following workplan sections in the sequence indicated:

Work:

Contractor will comply with applicable Codes, Regulations, and Standards. governmental agencies before start of work.

Contractor will provide Air Monitoring - Test Laboratory Services to demonstrate to the Owner so that the building areas beyond the work areas will remain uncontaminated. Air monitoring to determine required respiratory protection is the responsibility of Contractor.

Contractor will provide Worker Protection. Contractor will provide the equipment and procedures for protecting workers against lead contamination and other workplace hazards.

Work Procedures:

Section 02064 - Removal of Lead-Based Paint Substrates
Section 02065 - Removal of Loose and Flaking Lead-Based Paint
Section 02066 - Chemical Stripping of Lead-Based Paint
Section 02067 - Disposal of Lead-Based Paint Waste Material

1.3 WORK PLAN

Submit detailed plans of the procedures proposed for use in complying with the requirements of these Workplans. Include in the plans the locations and layouts of decontamination areas; the sequencing of lead work; the interface of trades involved in the performance of work; methods to be used to assure the safety of building occupants and visitors to the site; the disposal plan, including location of approved disposal site; and a detailed description of the methods to be employed to control pollution. Expand upon the use of the portable high-efficiency particulate air (HEPA) ventilation system, closing out of the building's heating, ventilation, and air conditioning (HVAC) system, method of removal to prevent visible emissions in work areas, and bagging of removed lead debris. The plan must be approved by the Consultant prior to commencement of work.

1.4 INSPECTION

Prior to commencement of work, inspect areas in which work will be performed. List damage to structure, surfaces, equipment, or surrounding properties noted during the inspection that could be misconstrued as damage resulting from the Work. Submit to Consultant prior to starting work.

1.5 POTENTIAL LEAD HAZARD

The disturbance or dislocation of lead-based painted materials may cause lead dust to be released into the building's atmosphere, thereby creating a potential health hazard to workers and building occupants. Apprise all workers, supervisory personnel, subcontractors and consultants who will be at the job site of the seriousness of the hazard and of proper work procedures, which must be followed.

Where in the performance of the work, workers, supervisory personnel, subcontractors, or consultants may encounter, disturb, or otherwise function in the immediate vicinity of any identified lead-based paint, take appropriate continuous measures as necessary to protect all building occupants from the potential hazard of exposure to lead dust. Such measures shall

include the procedures and methods described herein, and compliance with regulations and guidelines of applicable federal, state, and local agencies.

1.6 STOP WORK

If Owner or Consultant presents a written Stop Work Order, immediately and automatically stop all work. Do not re-commence work until authorized by Consultant.

1.7 CONTRACTOR USE OF PREMISES

Limit use of the premises to the Work indicated, so as to allow for Owner occupancy and use by other trades required in the buildings. Confine operations at the site to the areas permitted under the Contract.

Portions of the site beyond areas on which work is indicated are not to be disturbed. Conform to site rules and regulations affecting the Work while engaged in project construction.

Keep existing driveways and entrances serving the premises clear and available to Owner and his employees at all times. Do not use these areas for parking or storage of materials.

Do not encumber the site with materials or equipment. Confine stockpiling of materials and location of storage sheds to the areas designated by Owner. If additional storage is necessary, obtain and pay for such storage off-site.

Lock automotive-type vehicles, such as passenger cars and trucks, and other mechanized or motorized construction equipment, when parked and unattended, so as to prevent unauthorized use. Do not leave such vehicles or equipment unattended with the motor running or the ignition key in place or accessible to unauthorized persons.

Maintain existing buildings in a safe and weather tight condition throughout the construction period. Repair damage caused by construction operations. Take all precautions necessary to protect the buildings and their occupants during the construction period.

Keep public areas such as hallways, stairs, elevator lobbies, and toilet rooms free from accumulation of waste, rubbish, or construction debris.

Smoking or open fires will not be permitted within any of the buildings on the premises.

Except for toilet rooms designated by Owner for use by Contractor's personnel, use of existing toilets within the buildings, by Contractor and his personnel, will not be permitted.

1.8 LOADS AND STRESSES

Contractor shall have full responsibility for preventing overstresses of any structure or any part or member of the structure during the Work. Contractor shall fully check the effect of the operation in this regard and shall provide all support necessary.

1.9 VERIFICATION OF QUANTITIES

It is the responsibility of Contractor to verify all LBP locations and quantities of LBP in each work area. Contractor shall fully inform himself of the conditions relating to construction of the Work and employment of labor thereon. Failure to do so will not relieve a successful Offeror of his

obligation to furnish all material, equipment, and labor necessary to carry out the provisions of the Contract.

1.10 OWNER OCCUPANCY

Separate Contract: Owner has been awarded a separate contract for performance of certain construction operations at the site. Those operations will be conducted simultaneously with work under this Contract and Contractor shall work in cooperation with the other trades performing said operations.

Owner reserves the right to place and install equipment as necessary in areas of the building in which all lead removal and project decontamination procedures have been completed and to occupy such completed areas prior to substantial completion, provided that such occupancy does not substantially interfere with completion of the Work. Such placing of equipment and partial occupancy shall not constitute acceptance of the Work or any part of the Work.

1.11 SUBMITTALS

Submit all required documents, identified in Section 01301 - Submittals, to Consultant for review prior to the start of work in any given work area. Do not begin work until these submittals are returned, approved by Owner and Consultant.

1.12 PROJECT SCHEDULE

The project is scheduled to begin on the date established in the Notice to Proceed and shall be completed as specified on the Proposal Form and in these Contract Documents. Contractor shall submit his work schedule to the Owner for approval. Work schedule shall be coordinated based on the availability of the work area and whether or not the building is occupied. Work hours will initially be scheduled as outlined in paragraph 1.2 of this Section.

Removal of lead-containing waste material from temporary storage inside containment to waste dumpsters shall be approved by the Owner or shall be conducted as otherwise specifically approved in writing. During transportation of all waste materials, the lead bags, dumpsters, and warning labels will be visually obscured from public view.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01014

SECTION 02064 - REMOVAL OF LEAD-BASED PAINTED SUBSTRATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS:

Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division-1 Workplan sections, apply to work of this section.

1.2 SUMMARY OF WORK

Work of this section includes the removal and off-site disposal of the following lead-based painted substrates

Not Applicable: components coated with LBP will be chemically stripped and prepared for repainting per section 02066

1.3. EXISTING CONDITIONS

Existing conditions are reflected accurately to the best of Owner's knowledge. Should minor conditions be encountered that are not exactly as indicated, modification to the Work shall be made as required at no additional expense to Owner. Contractor is responsible for thoroughly familiarizing himself with all conditions and requirements of the Work, including Lead-Based Paint (LBP) locations and quantities, prior to submittal of a Proposal. Contractor shall refer to the attached tables, hereby listed in Appendix B of the Contract Documents for assistance in identifying LBP locations.

PART 2 - PRODUCTS

2.1 DISPOSAL BAGS/PLASTIC SHEETING

Provide 6 mil polyethylene disposal bags or wrap substrates to be disposed of in 6-mil polyethylene, sealed with duct tape.

2.2 WET DETERGENT WASH

Provide detergent with a high phosphate content (at least 5%) trisodium phosphate (TSP). Follow dilution ratio recommended by the manufacturer's instructions.

Wet Detergent Wash: Provide detergent or cleaning agent formulated to be effective in removing lead dust. Follow dilution ratio recommended by the manufacturer's instructions.

PART 3 - EXECUTION

Prior to initiating Work, Contractor shall ensure compliance with Section 01555 - Worker Protection - Lead Based Paint

3.1 SECURING WORK AREA:

Secure work area from access by occupants, staff or users of the building. Accomplish this where possible, by locking doors, windows, or other means of access to the area.

3.2 DEMARCATION OF REGULATED AREA:

Demarcate each exterior regulated area with a sheet plastic drop sheet and barricade fence. Provide barricade fence with support posts four feet (4') on center. Provide barrier-warning tape at perimeter with the following legend "Caution Lead Hazard - Do Not Enter Work Area Unless Authorized." Barricade fence shall be securely fastened and no closer than twelve feet (12') radius from the work.

3.3 EXTERIOR RENOVATION GENERAL PROCEDURES

The following precautions and procedures have application to the work of this section. Workers must exercise caution to avoid the release of lead dust into the air and to contain lead dust and debris on drop sheet.

Before start of work comply with requirement for worker protection and respiratory requirements as specified in the Contract Documents.

Do not allow eating, drinking, smoking, chewing tobacco or gum, or applying cosmetics in the regulated area.

Provide one layer of 6-mil polyethylene sheeting as close to foundation as possible. Extend the sheeting out from the foundation a distance of 3 feet per story being abated or a minimum of 6 feet and a maximum of 15 feet. Weight the sheeting at the foundation and along edges and seams. Erect vertical shrouds or suspend work if constant wind speed exceeds 20 mph or there is visible movement of debris beyond ground sheeting.

On a daily basis, collect dust and debris by HEPA vacuuming the surface and by wet sweeping. At the end of each workday, remove polyethylene sheeting and place in 6 mil disposal bags. Visually examine the immediate area to ensure that no lead debris has escaped containment. Wet sweep or rake up any debris found and place in 6 mil disposal bags. Securely store with other waste.

Suspend work activities during inclement weather; including but not limited to rain, snow, ice, and hail.

3.4 GENERAL

Score paint at edges, corners etc. to reduce chipping of paint. Carefully remove by wet scraping loose and flaking paint prior to removal of substrate in accordance with the following procedure:

- Fine mist the painted surface with wet wash detergent or water using plant mister or garden sprayer and carefully scrape loose and flaking material.
- Clean up paint chips and flakes by HEPA vacuuming or wet wiping with wet towels. Care shall be taken to avoid damage to adjacent areas during the removal of substrates.
- Using wet-demolition techniques, remove substrate from building framing or structural members by tooling the substrate from the structural members. Substrates coated with LBP

shall be kept wet at all times during the removal, cleanup, and containerizing of the substrates. Under no circumstances shall the contractor let the removed substrate drop more than six feet from its location to the floor or ground.

- Carefully remove the lead based painted substrates to minimize the disturbance of lead-based paint and the generation of lead dust.
- HEPA vacuum and/or wet wipe to remove all paint chips, debris and dust generated during the work. Do not allow dust or debris to accumulate.
- Substrates that are removed shall be wrapped, labeled and disposed of or disposed of in accordance with section 02067 - Disposal of Waste Materials - Lead-Based-Paint.

END OF SECTION 02064

SECTION 02065 - REMOVAL OF LOOSE AND FLAKING LEAD-BASED PAINT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS:

General provisions of the Contract, including General and Supplementary Conditions and other Division-1 Workplan sections, apply to work of this section.

1.2 SUMMARY OF WORK

Work of this section includes the removal and off-site disposal of lead-based paint from the following substrates.

Not Applicable: components coated with LBP will be chemically stripped and prepared for repainting per section 02066

The Architect/ Engineer or their designated representative, will be responsible for final inspection on completeness of preparation of the work surface

PART 2 - PRODUCTS

2.1 DISPOSAL BAGS/PLASTIC SHEETING: Provide 6 mil polyethylene disposal bags or wrap substrates to be disposed of in 6-mil polyethylene, sealed with duct tape.

2.2 Wet Detergent Wash: Provide detergent with a high phosphate content (at least 5%) trisodium phosphate (TSP). Follow dilution ratio recommended by the manufacturer's instructions.

PART 3 - EXECUTION

3.1 GENERAL

Carefully remove by wet scraping and/or sanding all loose and flaking paint in accordance with the procedures set forth in this section.

3.2 CRITICAL BARRIERS

Remove all removable furniture that has been designated uncontaminated by the Work Procedures or Consultant's Project Manager. Also remove uncontaminated equipment and/or supplies from the work area before commencing work, or completely cover with two (2) layers of polyethylene sheet at least 6 mil in thickness, securely taped in place with duct tape. Such furniture and equipment shall be considered outside the work area unless covering plastic or seal is breached.

Completely separate the work area from other portions of the building and the outside environment by closing all openings with sheet plastic barriers at least 6 mil in thickness or by sealing cracks with spray-foam, poly sheeting, and/or duct tape.

Individually seal all ventilation openings (supply and exhaust), lighting fixtures, clocks, doorways, windows, convector casings, spandrel panels, and speakers, and other openings into the work area polyethylene sheeting at least 6 mil in thickness, taped securely in place with duct tape. Maintain seal until all work, including project decontamination, is completed. Take care in sealing off lighting fixtures to avoid melting or burning the sheeting.

Clean all contaminated furniture, equipment, and/or supplies, prior to moving or covering, with a HEPA-filtered vacuum cleaner or by wet cleaning. All equipment or furniture is to be deemed contaminated unless specifically declared uncontaminated in writing by Consultant's Project Manager. Clean all surfaces in the work area with a HEPA-filtered vacuum or by wet wiping prior to installing the primary barrier.

Provide sheet plastic barriers at least 6 mil in thickness as required to completely seal openings from the work area into adjacent areas. Seal the perimeter of all sheet plastic barriers with duct tape or spray cement. Erect the entire assembly so that it hangs vertically without a "shelf" upon which debris could collect.

Provide a pressure differential system per Title 0900, Section 01513 - Temporary Pressure Differential and Air Circulation System.

3.3 PRIMARY BARRIER

Cover floors and other building surfaces not scheduled for removal with a primary barrier, as described below to protect these surfaces from water damage and high humidity and from contamination by lead dust.

Cover the floor of the work area with two individual layers of clear polyethylene sheeting, each at least 6 mil in thickness, lapped up on the walls at least 12 inches. Plastic shall be sized to minimize seams.

Form a sharp right-angle bend at the juncture of floor and wall so that there is no area of the sheeting that, if stepped on, would cause the wall attachment to be pulled loose.

3.4 SECONDARY BARRIER

Install as a drop cloth, a clear 6-mil sheet plastic in all areas where LBP removal work is to be carried out. Completely cover the floor with sheet plastic. Secure the sheet plastic in place with duct tape so that debris cannot filter behind it. Provide cross-strips of duct tape at the floor supports as necessary to support the sheet plastic and prevent its displacement during removal operations.

Install the secondary barrier at the beginning of each work shift. Install only sufficient plastic for work of that shift. Remove the secondary barrier at the end of each work shift or as work in an area is completed. Fold the plastic toward the center of the sheet and pack into disposal bags. Keep the material on the sheet continually wet until bagged.

3.5 REMOVAL OF LOOSE AND FLAKING PAINT

Apply a fine mist surface with wet wash detergent using plant mister or garden sprayer. Score the damaged paint at edges and corners to reduce chipping of paint. Carefully scrape loose and flaking material.

Where identified in the Reference Drawings, wet sanding will be required to prepare the substrate for repainting. Lightly sand with a moist sanding sponge or wet sandpaper to obtain a smooth transition edge between the remaining paint and the substrate.

HEPA vacuum and/or wet wipe to remove all paint chips, debris and dust generated during the work. Do not allow dust or debris to accumulate. Clean up paint chips and flakes by wet sweeping, HEPA vacuuming, or collecting in wet towels. Care shall be taken to avoid damage to adjacent areas during the removal of the loose and flaking paints.

At the end of each work shift, remove any paint chips, dust, and debris that collects on the sheeting and other surfaces by using a HEPA vacuum and by spraying with wet wash solution, collect debris with wet paper towels, place in disposal bags while still wet, and clean surface of sheeting and surfaces with wet cloths.

Empty HEPA vacuum and place contents into disposal bags. Place all rags, wet towels, and other disposable items used during the project into disposal bags. Tape the disposal bags shut with duct tape and wet wipe the exterior surfaces of all disposal bags and place in 55-gallon drums prior to exiting the work areas.

At the completion of work activities in each work area, wet wipe all surfaces, including floor sheeting with a wet detergent wash. Provide detergent with a high phosphate content (at least 5%) trisodium phosphate (TSP). Follow dilution ratio recommended by the manufacturer's instructions.

3.6 PRIMING AND SEALING

After complete drying, prepare the substrate and seal all surfaces where the loose and flaking lead-based paint was removed with a primer or encapsulant that is compatible with the substrate.

3.7 DAMAGES

Protect areas adjacent to substrates that are removed for replacement from damage caused by this work. Damages to non-protected areas or from lack of care shall be repaired or replaced at the Contractor's expense.

END OF SECTION 02065

SECTION 02066 - CHEMICAL STRIPPING OF LEAD-BASED PAINT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS:

Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division-1 Workplan sections, apply to work of this section.

1.2 GENERAL

The following is a list of prohibited lead hazard removal methods:

- Open flame burning;
- Chemical stripping with methylene chloride-based paint strippers;
- Uncontained abrasive blasting;
- Uncontained power washing;
- Dry sanding or scraping;
- Power sanding;
- Sanding of wood after chemical stripping.

1.3 SUMMARY OF WORK

Work of this section includes the removal and off-site disposal of lead-based paint from the following substrates.

Room/ Location	Substrate	Location	Approx. Quantity
Exterior	Shiplap Ceiling White Wood	East Side Main Entrance	120 SF
Exterior	Door Frames Brown Wood	East Side Main Entrance	3 Door Frames
Interior	Window Frames Multi Colors Wood	Room A, B, D, East Side Restroom and Room C West Wall	29 Windows
Interior	Front of Stage Green Wood	Room C	70 SF

NOTE: LBP Remediation will be conducted in conjunction with asbestos abatement activities. If a conflict between the asbestos and LBP guidance occurs, the more stringent will be followed.

1.4 SUBMITTALS

Before start of work: Submit the following to the Consultant for review. Do not start work until these submittals are returned with Consultant approval indicating that the submittal is returned for unrestricted use.

1.4.1 Chemical Stripping Removers and Neutralizers

Submit product data, use instructions and recommendations from manufacturer for use intended. Include data substantiating that material complies with requirements.

1.4.2 Material Safety Data Sheet

Submit material safety data sheet, or equivalent, in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) for each chemical stripper and neutralizer, include a separate attachment for each sheet indicating the specific worker protective equipment proposed for use with the material indicated.

PART 2 - PRODUCTS

2.1 Chemical Stripping Removers

Shall contain no methylene chloride products. Chemical removers shall be compatible with, and not harmful to, the substrate to which they are applied. The contractor shall comply with the manufacturer's recommendations for use of the product supplied.

2.2 Chemical Stripping Agent Neutralizer

Provide chemical agent neutralizer in accordance with manufacturer's recommendations. Neutralizers shall be compatible with and not harmful to the substrate. Neutralizers shall also be compatible with the stripping agent used.

2.3 Wet Detergent Wash

Provide detergent with a high phosphate content (at least 5%) trisodium phosphate (TSP). Follow dilution ratio recommended by the manufacturer's instructions.

PART 3 - EXECUTION

3.1 CHEMICAL LEAD-BASED PAINT REMOVAL ON-SITE

Chemical Stripping Agents and neutralizers shall be applied in accordance with the recommendations of the manufacturer.

3.2 Caustic Stripper Neutralization

Caustic strippers shall be neutralized in accordance with manufacturer's recommendations. Provide workers with proper protective equipment, including but not limited to; protective clothing (non-paper), chemically resistant gloves, eye protection and respiratory protection with filters selected for the hazards to be encountered.

3.3 Remove Stripper Sludge

Place lead containing stripper sludge in corrosion-proof containers and place in a secure waste storage area. The surface from which lead-based paint has been removed shall be thoroughly scrubbed, while still damp from the stripper, in accordance with the manufacturer's recommendation. Monitor pH of the neutralizing solution to ensure it has not become neutralized in the process. If the pH exceeds 6.5, or the solution becomes overly soiled, change solution. Solution may be classified as hazardous waste. Place in 55-gallon drums and test in accordance with Section 02067- Disposal of Waste Materials - Lead-Based Paint. The surface shall be tested with litmus paper following this process. If the litmus paper turns pink, the acid has effectively neutralized the alkali. If litmus turns blue continue scrubbing until satisfactory results are achieved.

3.4 Final Cleaning Of Surfaces

Prepare wet detergent wash. Workers must wear eye shields and chemically resistant gloves when working with this solution. Thoroughly scrub stripped surface to remove as much remaining lead residue as possible. The wash solution may also be hazardous waste, treat in accordance with Section 02067- Disposal of Waste Materials - Lead-Based Paint. Following wet detergent wash, perform a final wash with clear water to remove any traces of detergent. Sponges used in the clean-up process may not be reused and must be placed in double 4 mil or single 6 mil plastic bags, which will be sealed, labeled, and placed in the secure waste storage area. Surfaces must be allowed to dry thoroughly before repainting. A grayish film indicates that significant lead residues remain, and the cleaning process must be repeated. If a white powder appears, the surface is Alkaline and requires further neutralization.

3.4 Painting and Sealing

After complete drying, prepare the substrate and seal all surfaces where lead-based paint was removed with a primer or encapsulant that is compatible with the substrate.

END OF SECTION 02066

SECTION 02067 - DISPOSAL OF WASTE MATERIALS - LEAD-BASED PAINT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Workplan Sections, apply to work of this section.

1.2 DESCRIPTION OF THE WORK

This section describes the disposal of lead-containing or lead contaminated waste materials. Disposal includes packaging of waste materials.

1.3 SUBMITTALS:

Before the start of work, Contractor shall submit the following to the Owner's Consultant for review. Do not start work until these submittals are returned with Owner's Consultant action stamp indicating that the submittal is returned for unrestricted use.

- Contractor must ascertain that the facility owner is registered with the U.S. EPA as a generator of hazardous waste. If there is no generator status established, the contractor shall assist the owner in obtaining generator identification numbers.
- Copy of state or local license for waste hauler.
- U.S. EPA identification number of waste hauler.
- Name and address of waste disposal facility where hazardous waste materials are to be disposed. Include contact person and telephone number. Copy of state license and permit. Provide disposal facility permits.
- Copy of EPA "uniform hazardous waste manifest" form.
- Copy of EPA "notification of hazardous waste activity" form.
- Copy of forms required by state or local agencies.
- Sample disposal bag and labels to be used.

Submit copies of all manifests and disposal site receipts to Owner's Consultant

PART 2 - PRODUCTS

Disposal Bags: Provide 6 mil thick leak tight polyethylene bags or wrap components in 6 mil polyethylene sheeting and seal with duct tape. "Label with specific Hazardous Waste Label:"

For wrapped materials provide stick-on labels.

PART 3 - EXECUTION

3.1 GENERAL

All lead-based paint and lead-contaminated paint shall be treated as hazardous waste unless testing identifies the waste stream otherwise:

It shall be the responsibility of the Contractor to have each waste stream evaluated for determination of hazardous waste. Testing of waste shall be performed by a laboratory accredited by either the American Industrial Hygiene Association (AIHA) or the American Association of Laboratory Accreditation (AALA) retained by the contractor. Contractor shall include the cost of testing in the contract sum and supply all test results to the owner.

Sample analysis of each waste stream generated at the Site be performed by a qualified laboratory for Toxicity Characteristic Leaching Procedure (TCLP). The contractor shall pay for all samples obtained at the site for his use.

Waste steams tested that results in a lead content in the TCLP of greater than or equal to five parts per million (5ppm) is to be considered hazardous and shall be handled and disposed according to local, city, state, and federal regulations.

Place all waste generated during the project in a minimum of a single 6-mil disposal bags (or wrap in 6-mil polyethylene sheeting), place bag in DOT Approved 55-gallon steel drum and store in the designated storage area or in an enclosed dumpster.

Properly store and secure waste at all times. Do not leave debris in uncovered or unlocked trucks or dumpsters. Do not incinerate debris or use an unauthorized dumpster. Do not introduce lead contaminated water into storm or sanitary sewers. Do not permit recycling of building components coated with Lead-Based Paint.

3.2 DISPOSAL OF HAZARDOUS LIQUID OR SOLID WASTES

Comply with RCRA, DOT, STATE, and local regulations. Comply with DOT and STATE regulations for containers. The most stringent regulation shall apply.

Apply for an EPA identification number from the appropriate regional office if more than 100 kg of hazardous waste is generated from the lead hazard reduction process during any calendar month.

All waste is to be hauled by a licensed waste hauler with all required licenses from all state and local authorities with jurisdiction. Load all waste material into properly labeled disposal bags, polyethylene sheeting and leak-tight drums. All materials are to be contained as follows:

- One 6 mil layer of sheet polyethylene (duct tape all seams) or One 6 mil disposal bag; and
- Sealed steel drum

Protect interior of truck or dumpster with two layers of 6 mil polyethylene sheeting with all seams sealed with duct tape.

Carefully load containerized waste in fully enclosed dumpsters, trucks or other appropriate vehicles for transport. Exercise care before and during transport, to ensure that no unauthorized persons have access to the material.

Do not store containerized materials outside of the Work Area. Take containers from the Work Area directly to the designated storage area, sealed truck, or dumpster,

Retain all documents from the disposal or treatment facility. At completion of hauling and disposal of each load submit copy of Uniform Hazardous Waste Manifest, to Owner's Project Monitor.

3.5 BACKCHARGES

Where Contractor fails to fulfill packaging, handling, or disposal requirements as outlined herein, Owner will charge back to Contractor all costs associated with insuring that hazardous wastes are packaged and segregated in accordance with EPA and DOT regulations.

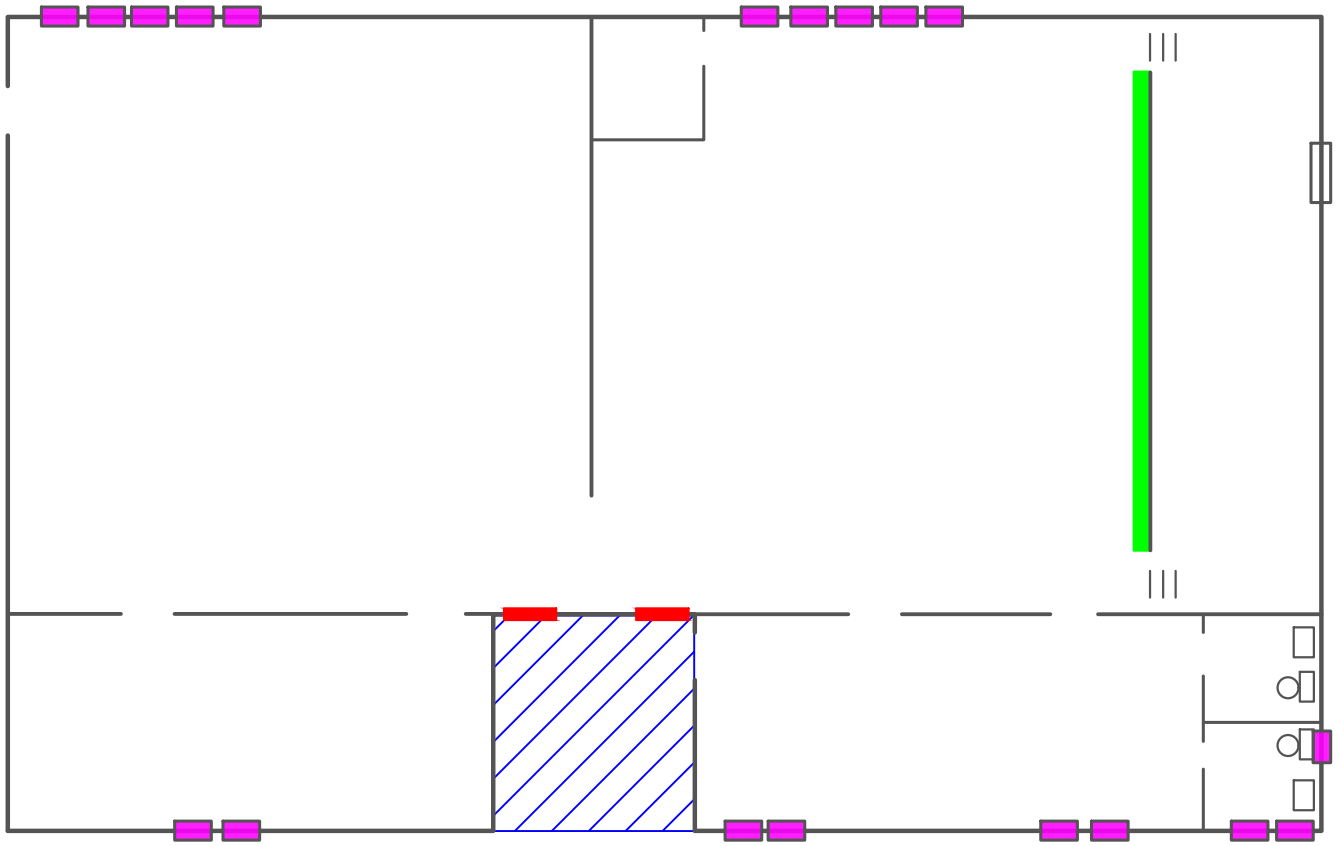
Environmental pollution of Owner's property resulting from Contractor's hazardous waste management activities shall be promptly remediated under Owner direction, to the Owner's sole satisfaction, and at the Contractor's sole expense.

Contractor agrees to either reimburse the Owner or reduce the Contract amount by change order to cover all costs associated with waste repackaging, waste re-segregation, or pollution remediation efforts.

END OF SECTION - 02067

APPENDIX A

REFERENCE DRAWING



Exterior Shiplap Ceiling Wood, White (~120 SQ FT)
Front of Stage Wood Paint, Green (~70 SQ FT)
Interior Wood Window Frames, Multi-colored (~29 Windows)
Exterior Wood Door Frames, Brown (~3 EA)

CHAMPION environmental consulting
109 West 7th Street
Suite 210
Georgetown, Texas 78626

CLIENT:
CITY OF DRIPPING SPRINGS

511 Mercer Street
Cripping Springs, Texas 78620

SITE: STEPHENSON BUILDING
101 Old Fitzhugh Road
Dripping Springs, Texas 78620

C-ECI Project No. 23-1730
By: N Hackney
Approved By: W Champion
Submitted: 4/4/2024
Not To Scale

Lead-Based Paint Location Plan

Figure 1