



ASBESTOS CONTAINING MATERIAL INVESTIGATION REPORT

SC - 72 (CARLISLE CHESTER HWY.) BRIDGE OVER COX CREEK
SCDOT BRIDGE #444007200400
UNION COUNTY, SOUTH CAROLINA

PREPARED FOR:



C/O Ms. Lila Leon, PE PhD
SC Geotechnical Lead
1201 Main Street, Suite 800
Columbia, SC 29201

PREPARED BY:

F&ME Consultants
1825 Blanding Street
Columbia, South Carolina 29201

February 22, 2023

☐ ACM was found.
☒ ACM was not found.

F&ME Project No.: G6658.001

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1. EXECUTIVE SUMMARY

This executive summary is intended as an overview for the convenience of the reader. This report should be reviewed in its entirety prior to making any decisions regarding this project.

F&ME Consultants Inc. (FME) has completed an Asbestos Containing Material (ACM) Investigation of SCDOT Bridge #444007200400 located along SC-72 (Carlisle Chester Hwy.) Crossing over Cox Creek (Bridge), in Union County, South Carolina at the request of HDR (Client). The field investigation was performed on February 7, 2023, in anticipation of the replacement of the existing bridge structure. This investigation was also conducted pursuant to South Carolina Department of Health and Environmental Control (SCDHEC), United States Environmental Protection Agency (USEPA), National Emission Standards for Hazardous Air Pollutants (NESHAP), and Occupational Safety and Health Administration (OSHA) regulations requiring an ACM investigation prior to any demolition and/or renovation activities.

Per an agreed upon scope of work, FME performed this investigation to identify any ACM that might be encountered during the demolition activities, associated with the existing Bridge, and to provide recommendations regarding proper handling and disposal of any ACM found. **The investigation of the subject Bridge found no suspect materials.** Therefore, at this time, no special handling or disposal requirements are required regarding ACM. However, during the course of demolition activities, previously concealed ACM might be discovered. If ACM is found, the affected contractor(s) must stop work, take appropriate actions, and notify the Owner/asbestos Consultant for an appropriate response action. The SCDHEC must be notified if any suspect ACM is discovered.

We sincerely appreciate the opportunity to assist you with this project. Should you have any questions or require additional information concerning this Investigation, please do not hesitate to contact our office at (803) 254-4540.

Sincerely,

F&ME CONSULTANTS



Michael S. Mincey

Environmental Professional

Asbestos Consultant/ Management Planner

SCDHEC License No: MP-00161

Expiration Date 01/23/2024



Glynn M. Ellen

Environmental Department Manager

Asbestos Consultant/ Management Planner

SCDHEC License No: ASB-22641

Expiration Date 01/23/2024



2. INTRODUCTION

F&ME Consultants has completed an ACM investigation of SCDOT Bridge #444007200400 located along SC-72 (Carlisle Chester Hwy.) Crossing over Cox Creek, in Union County, South Carolina. The investigation was performed on February 7, 2023. This investigation was conducted pursuant to SCDHEC, USEPA, NESHAP, and OSHA regulations which require an ACM investigation prior to any demolition and/or renovation activities. See Appendix A – Site Vicinity Map for the location of Bridge.

It is our understanding that the proposed project will include the complete demolition and removal of the existing bridge structure, and replacement with a new bridge off of the existing horizontal alignment. The purpose of this investigation was to determine if asbestos was present on the existing bridge structure by identifying and sampling suspect ACM, obtaining analytical results, quantifying any confirmed ACM, and assessing the physical condition of the ACM, where possible.

This report has been prepared exclusively for the Client and shall not be disseminated in whole or part to other parties without prior consent from the Client or FME. No other environmental issues were addressed as part of this report.

3. EXISTING BRIDGE STRUCTURE

The existing Bridge (~52.0' L x 42.0' W, inside curb to inside curb), is located on SC-72 (Carlisle Chester Hwy.) and crosses over Cox Creek in Union County, South Carolina. The construction date of the Bridge is unknown. The existing Bridge is a three (3) span, two (2) lane concrete and steel bridge, with an asphalt overlay. The bridge deck is constructed poured-in-place (PIP) triple barrel concrete box culvert. At some point, the Bridge was widened approximately 8' on the north and south sides. The widening included PIP concrete bridge decking installed over PIP concrete bent caps supported by two (2) structural steel H-piles on each side of the interior bents. No drainage scuppers were noted on the bridge structure. Metal guardrails and posts are attached to the concrete curb on each side. A PVC utility conduit was attached to the concrete curbing on the north side of the Bridge and runs its entire length. Refer to Appendix A – Site Vicinity Map, for the location of the structure.



Photo 1: SC 72 (Carlisle Chester Hwy.) over Cox Creek, Union County, South Carolina



4. FIELD ASSESSMENT

During the investigation, all accessible bridge components (i.e., concrete bent caps, piles, and expansion joints) were visually inspected for suspect ACM. Examples of possible suspect materials include bent and pile cap felt, bond-break pads, expansion joint material, and drainage scuppers. The bridge deck rested directly on the PIP triple barrel concrete culvert. The widened sections of the Bridge rested directly on concrete bent caps with no suspect materials (i.e., bond-break pads) observed/visible between them. No suspect ACM materials were identified on the subject Bridge. See Appendix B – General Bridge Plan. Also, see Appendix G – Site Photographs, for more details.

5. RECOMMENDATIONS

The results, conclusions, and recommendations of this Investigation are representative of the conditions observed at the site on the date of the field investigation. FME does not assume responsibility for any changes in conditions or circumstances that may have occurred after this investigation.

It is our understanding that the subject structure is to be demolished in anticipation of constructing a new bridge. **No suspect ACM were found on this existing Bridge.** Therefore, there are no foreseen special handling or disposal requirements, regarding asbestos, that will be required for the demolition of this Bridge.

If any concealed and/or inaccessible suspect ACM (i.e., bond break materials) are encountered during the demolition activities, the affected contractor(s) must stop work, take appropriate actions, and notify the Owner/asbestos Consultant for an appropriate response action. SCDHEC must be notified if any suspect ACM is discovered.

This report has been prepared exclusively for the Client and FME and shall not be disseminated in whole or in part to other parties without prior consent from the Client. Use of this document for bidding purposes is not recommended without prior consultation with FME.

We sincerely appreciate the opportunity to be of service to HDR in this matter. If you have any questions regarding the information presented herein, please contact our office at (803) 254-4540.



APPENDICES

Appendix A – Site Vicinity Map

Appendix B – Sample Location Plan

Appendix C – Personnel Certifications

Appendix D – Site Photographs



Appendix A

Site Vicinity Map



1:72,000

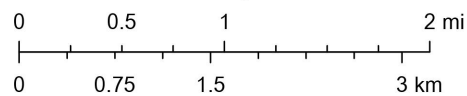


FIGURE
NUMBER:

1

F&ME CONSULTANTS
PROJECT NUMBER:

G6658.001

ASBESTOS CONTAINING MATERIALS INVESTIGATION
SC 72 Bridge over Cox Creek
Union County, SC
Site Vicinity Map
Prepared for: HDR, Inc.
1201 Main Street, Suite 800
Columbia, SC 29201



1825 BLANDING STREET
COLUMBIA, SC 29201

ORIGINAL:
February 16, 2023

REVISIONS:

1
2
3

SCALE:
AS SHOWN

DRWN. BY: MSM
CHKD. BY: MSM
APPR. BY: GME

NOTES:

Appendix B

General Bridge Plan



SC-72

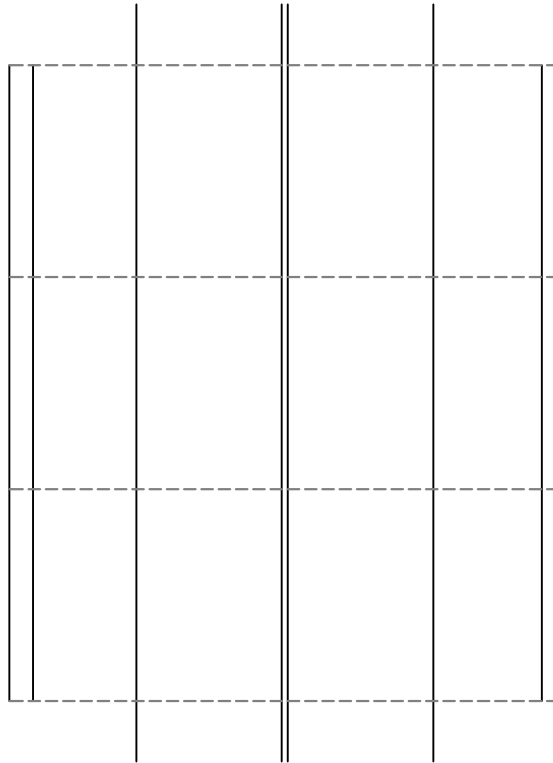


FIGURE
NUMBER:

2

F&ME CONSULTANTS
PROJECT NUMBER:

G6658.001

ASBESTOS CONTAINING MATERIALS INVESTIGATION
SC 72 Bridge over Cox Creek
Union County, SC
General Bridge Plan
Prepared for: HDR, Inc.
1201 Main Street, Suite 800
Columbia, SC 29201



1825 BLANDING STREET
COLUMBIA, SC 29201

ORIGINAL:
February 16, 2023

REVISIONS:

1 _____
2 _____
3 _____

SCALE:
N.T.S.

DRWN. BY: MSM
CHKD. BY: MSM
APPR. BY: GME

NOTES:

Appendix C

Personnel Certifications

SCDHEC ISSUED

Asbestos ID Card

Glynn M Ellen



AIRSAMPLER	AS-00079	Expiration Date: 01/22/24
CONSULTMP	ASB-22641	01/23/24
CONSULTPD	PD-00098	07/12/23
SUPERAHERA	SA-00455	01/22/24

This card is nontransferable and considered invalid if loaned or given to another person for identification. This card will also be invalid if altered or defaced. This card is property of SCDHEC. It must be returned to the department if the holder's accreditation is revoked or if this card is invalidated. Any person performing regulated asbestos activities without current accreditation shall be subject to legal sanction. This card must be returned upon expiration and/or issuance of a new card.

YOU MUST HAVE THIS IDENTIFICATION CARD WITH YOU ON THE JOB.

For information of corrections contact: SCDHEC - Asbestos Section
2600 Bull Street
Columbia, SC 29201
(803) 898-4289

SCDHEC ISSUED

Asbestos ID Card

Michael Mincey



**AIRSAMPLER
CONSULTMP
SUPERAHERA**

**AS-00272
MP-00161
SA-01424**

Expiration Date:

**01/22/24
01/23/24
01/22/24**

This card is nontransferable and considered invalid if loaned or given to another person for identification. This card will also be invalid if altered or defaced. This card is property of SCDHEC. It must be returned to the department if the holder's accreditation is revoked or if this card is invalidated. Any person performing regulated asbestos activities without current accreditation shall be subject to legal sanction. This card must be returned upon expiration and/or issuance of a new card.

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2600 Bull Street
Columbia, SC 29201
(803) 898-4289

Appendix D

Site Photographs



Photo 1. Top View of Bridge Deck.



Photo 2. Underside View of Bridge.



Photo 3. North Side View of Bridge.



Photo 4. South Side View of Bridge.



Photo 5. New Bridge Addition Underside View.



Photo 6. SCDOT Bridge Number Placard Attached to the Concrete Guardrail.

