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220 Athens Way, Suite 410 | Nashville, Tennessee 37228 | Telephone 615-255-9300 | Facsimile 615-255-9345 | www.ensafe.com

December 3, 2013

Mr. Jim Ozment
Tennessee Department of Transportation
Department of Environment and Conservation
Suite 900, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243-1402

Re: Asbestos Inspection Report
Montgomery County; SR237 Bridge Over Westbound I-24
Bridge #: 63I00240026 (2.31)
TDOT Project # 63030-1209-04, PIN 119831.00
TDOT Contract: E1647; Work Order: 058

Dear Mr. Ozment:

Enclosed is the asbestos inspection report for the above-referenced bridge. A total of 32 samples were obtained during the inspection. Non-friable asbestos was detected in the white texture coating that was applied to the parapet walls, the underside of the bridge deck, the abutment, the bridge overhang, the bridge columns, and the concrete slopes. There is approximately 15,000 square feet of asbestos-containing material on the bridge.

Abatement of these materials requires trained workers and a Competent Person to oversee the work (an Asbestos Supervisor). Additionally, state of Tennessee asbestos accreditation requirements (Tennessee Code Annotated 1200-01-20) mandate that such work be performed by an accredited firm (contractor) using accredited abatement workers and supervisors.

Also please note that if abatement activities are required, a 10-day notification of those activities may need to be submitted to the Tennessee Department of Air Pollution Control.

If you should have any questions, please call me at (615) 255-9300.

Sincerely,

EnSafe Inc.

By: Tammy Keim Williams
Project Manager

Enclosure



TENNESSEE DEPARTMENT OF TRANSPORTATION ASBESTOS INSPECTION REPORT

Bridge Over Westbound I-24
Bridge No. 63I00240026 (2.31)
SR-237
Montgomery County



Prepared by:



ENSAFE INC.

220 Athens Way, Suite 410
Nashville, Tennessee 37228

December 3, 2013

EnSafe Project Number: 0888814670

Robert Thomas (Signature)

Tennessee Asbestos Inspector Accreditation No:A-I-48812-26747

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1.0 INTRODUCTION

This report presents the findings of an inspection for asbestos containing materials (ACM) completed on the bridge identified in Section 1.1. The inspection was completed by EnSafe Inc. in accordance with the State of Tennessee, Department of Transportation (TDOT) Environmental Division, Social and Cultural Resources Office, Hazardous Materials Section requirements.

1.1 TDOT BRIDGE IDENTIFICATION

The bridge is identified in the TDOT Project System/Bridge Management System as:

TDOT PE Number: 63030-1209-04
TDOT PIN Number: 119831.00
Bridge Inventory Number: 63I00240026
State Route (SR) Number: SR-237
Log Mile (LM) Number: 2.31

1.2 GENERAL DESCRIPTION

The bridge, located on SR-237 at LM 2.31, is a 3-span 182-foot bridge over westbound I-24, in Montgomery County, Tennessee. Figure – 1 shows the general location of the bridge.

2.0 INSPECTION

The identification of ACM is performed by collecting bulk samples of suspect materials and having those samples analyzed by a laboratory. ACM are those materials found to contain greater than 1% asbestos by calibrated visual area estimation (CVAE) by polarized light microscopy (PLM).

Bulk sampling is a procedure in which representative homogeneous sampling areas in a structure are identified and then sampled. A homogeneous sampling area is defined as an area that contains material of the same type (uniform in color and texture) and is applied during the same general time period. Once the homogeneous sampling areas are identified, bulk samples of suspect materials are obtained at the discretion of our inspectors, based on site conditions and past experience.

2.1 PERSONNEL AND DATE(S) OF INSPECTION

The sampling and field activities were performed on November 14, 2013, by Robert Thomas, an Accredited State of Tennessee Asbestos Inspector. A copy of the inspector's and EnSafe's current accreditation from the State of Tennessee is included in Appendix A.

2.2 VISUAL SURVEY

EnSafe's survey began with a walk-through and visual survey of the structures located on the property. The visual survey consisted of:

- sketching the structure and/or verifying the plans provided
- locating and identifying homogeneous areas (HAs) of suspect materials that may contain asbestos minerals
- determining applicable sampling locations

2.3 ACCESS TO BRIDGE COMPONENTS

Individual bridge components were accessed by the following methods:

2.3.1 Top of Bridge Deck

The bridge was traversed on foot with the local TDOT office providing traffic control during the inspection and sampling of the top of the bridge deck. The bridge deck material appeared to be homogenous concrete across the entire deck. Samples (labeled as 26HA-2A through 26HA-2C) of the concrete bridge deck were obtained using hammers and chisels. Samples 26HA-1A and 26HA-1B were obtained from the expansion joints located at each end of the bridge.

2.3.2 Underside of Bridge Deck

The underside of the bridge deck was accessed by foot. Samples were obtained using hammers and chisels. Samples 26HA7-A through 26HA7-C were obtained from the bottom of the bridge deck. Samples 26HA-8A through 26HA-8C were obtained from the bridge overhang.

2.3.3 Bridge Beams

The bridge span was a single concrete box beam. The box beam was assessed with the underside of the bridge deck.

2.3.4 Bridge Columns/Bents and Supports

The bridge columns were accessed on foot. There were two columns supporting the bridge. Samples 26HA9-A through 26HA9-C were obtained from the pier columns. Samples 26HA11-A through 26HA11-C were obtained from the pad located between the base of the columns and the abutment slope.

2.3.5 Side Rails

There were concrete parapets extending the length of both sides of the bridge. Both were accessible on foot. Three samples were obtained of the cement (26HA4-A through 26HA4-C) and of what appeared to be a thin bridge coating (26HA3-A through 26HA3-C) of the parapet by using hammers, chisels, and scrapers.

2.3.6 Abutments

The abutments and abutment slopes on both sides of the bridge were accessed on foot. Samples were obtained using hammers and chisels. Samples 26HA6-A through 26HA6-C were obtained from the abutment. The abutment slope samples were labeled as 26HA5-A through 26HA5-C. Samples 26HA10-A through 26HA10-C were obtained from the pad located between the abutment and the abutment slope.

2.3.7 Bridge Drainage

Bridge drainage was provided via sheet flow.

3.0 ANALYTICAL PROCEDURES

3.1 ASBESTOS ANALYSIS PROCEDURES

The bulk samples are analyzed in the laboratory using PLM coupled with dispersion staining. PLM is an analytical method for asbestos identification, which identifies the specific asbestos minerals by their unique optical properties. The optical properties are a result of the mineral's chemical composition, physical atomic structure, and visual morphology. This is the U.S. Environmental Protection Agency (U.S. EPA) recommended method of analysis for asbestos identification in bulk samples.

In most instances, samples from each HA are analyzed on a “first positive stop” basis. “First positive stop” means that if one sample from a HA of material is found to contain greater than 1% asbestos, the remaining samples from that HA are not analyzed and the material is assumed to contain asbestos. In addition, samples which contain multiple layers, or that have associated mastic or adhesive backing, are analyzed as two or more separate samples. Samples that are identified to contain 1% or less asbestos minerals have been point counted by the laboratory for confirmation.

3.2 LABORATORY NAME AND ACCREDITATION

The bulk samples collected for this inspection were analyzed by a laboratory that has received accreditation from the National Institute of Standards and Technology (NIST) under the National Voluntary Laboratory Accreditation Program (NVLAP). The name and accreditation number of the analytical laboratory that analyzed the samples for this inspection is indicated in Table - 1:

Table – 1: Analytical Laboratory

Laboratory	Scientific Analytical Institute
NVLAP Number	200664-0

4.0 REGULATORY OVERVIEW

4.1 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

The U.S. EPA's National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations (40 Code of Federal Regulation [CFR] 61, Subpart B) requires that all regulated asbestos-containing materials (RACM) be properly removed prior to any renovation or demolition activities that will disturb them. These regulations define RACM as:

- Friable ACM.
- Category I non-friable ACM that has become friable.
- Category I non-friable ACM that will be or has been subject to sanding, grinding, cutting, or abrading.
- Category II non-friable ACM that has a high probability of becoming, or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

4.1.1 Definitions

Significant definitions related to regulation of asbestos under NESHAPS include:

Friable asbestos-containing material (ACM), is defined by the Asbestos NESHAP, as any material containing more than one percent (1%) asbestos as determined using the method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1, Polarized Light Microscopy (PLM), that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure. (Sec. 61.141)

Non-friable ACM is any material containing more than one percent (1%) asbestos as determined using the method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1, Polarized Light Microscopy (PLM), that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure. EPA also defines two categories of non-friable ACM, Category I and Category II non-friable ACM, which are described as follows:

Category I non-friable ACM is any asbestos-containing packing, gasket, resilient floor covering or asphalt roofing product which contains more than one percent (1%) asbestos as determined using polarized light microscopy (PLM) according to the method specified in Appendix A, Subpart F, 40 CFR Part 763. (Sec. 61.141)

Category II non-friable ACM is any material, excluding Category I non-friable ACM, containing more than one percent (1%) asbestos as determined using polarized light microscopy according to the methods specified in Appendix A, Subpart F, 40 CFR Part 763 that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure. (Sec. 61.141)

"Regulated Asbestos-Containing Material" (RACM) is (a) friable asbestos material, (b) Category I non-friable ACM that has become friable, (c) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting or abrading, or (d) Category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

Friable materials are defined as those which can be crumbled, pulverized, or reduced to powder by hand pressure when dry. The NESHAP regulations also establish specific notification and control requirements for renovation and demolition work.

5.0 RESULTS

The results of the asbestos inspection are presented in the following sections.

5.1 RESULTS OF ASBESTOS BULK SAMPLE ANALYSIS

A total of 32 samples were obtained from the bridge. Multiple samples of each HA were collected in accordance with State of Tennessee, Department of Transportation Environmental Division, Social and Cultural Resources Office, Hazardous Materials Section requirements and delivered to the laboratory for visual observation and microscopic analysis. The samples were selected based on HAs of suspect materials, as described in Section 2.2.

Table – 2 below, summarizes the various sampled materials which were found to contain greater than 1% asbestos minerals. The photographs provided in Appendix B illustrate the locations of ACM on the property. Based on the quantity of the surfacing material identified, a map is not provided showing the ACM locations. The white skim coating that covered the parapet walls, abutment, bottom of the deck (box beam), bridge overhang, concrete slope, and columns tested positive for asbestos. Photographs of the different HAs sampled that were found to be asbestos-containing are presented in Appendix B, and the analytical result of all the samples collected from the property, along with the chain-of-custody records, are included in Appendix C.

Table – 2: Materials Containing Greater than 1% Asbestos

Sample No.	HA/Material Description	Location (Bridge Component)	Approx Qty.	Friable (Y/N)	Type Asbestos and Content
26HA3-B and HA4-A, B, C	Concrete with white outer coating	Parapet walls	2366 sq ft	N	2% Chrysotile
26HA3-C	Concrete with white outer coating	Parapet walls	2366 sq ft	N	2% Chrysotile
26HA5-A - A	Concrete with white outer coating	Concrete slope	1880 sq ft	N	2% Chrysotile
26HA5-B - A	Concrete with white outer coating	Concrete slope	1880 sq ft	N	3% Chrysotile
26HA5-C - A	Concrete with white outer coating	Concrete slope	1880 sq ft	N	3% Chrysotile
26HA6-A - A	Concrete with white outer coating	Abutment	172 sq ft	N	2% Chrysotile
26HA6-B - A	Concrete with white outer coating	Abutment	172 sq ft	N	2% Chrysotile
26HA6-C - A	Concrete with white outer coating	Abutment	172 sq ft	N	2% Chrysotile

Table – 2: Materials Containing Greater than 1% Asbestos

Sample No.	HA/Material Description	Location (Bridge Component)	Approx Qty.	Friable (Y/N)	Type Asbestos and Content
26HA7-A - A	Concrete with white outer coating	Underside of Bridge Deck	7826 sq ft	N	2% Chrysotile
26HA7-B - A	Concrete with white outer coating	Underside of Bridge Deck	7826 sq ft	N	3% Chrysotile
26HA7-C - A	Concrete with white outer coating	Underside of Bridge Deck	7826 sq ft	N	3% Chrysotile
26HA8-A - A	Concrete with white outer coating	Overhang of Bridge Deck	1092 sq ft	N	3% Chrysotile
26HA8-B - A	Concrete with white outer coating	Overhang of Bridge Deck	1092 sq ft	N	3% Chrysotile
26HA8-C - A	Concrete with white outer coating	Overhang of Bridge Deck	1092 sq ft	N	2% Chrysotile
26HA9-A - A	Concrete with white outer coating	Column	768 sq ft	N	2% Chrysotile
26HA9-B - A	Concrete with white outer coating	Column	768 sq ft	N	2% Chrysotile
26HA9-C - A	Concrete with white outer coating	Column	768 sq ft	N	2% Chrysotile

HA Homogeneous Area
 LF Linear Feet
 SF Square Feet
 CF Cubic Feet

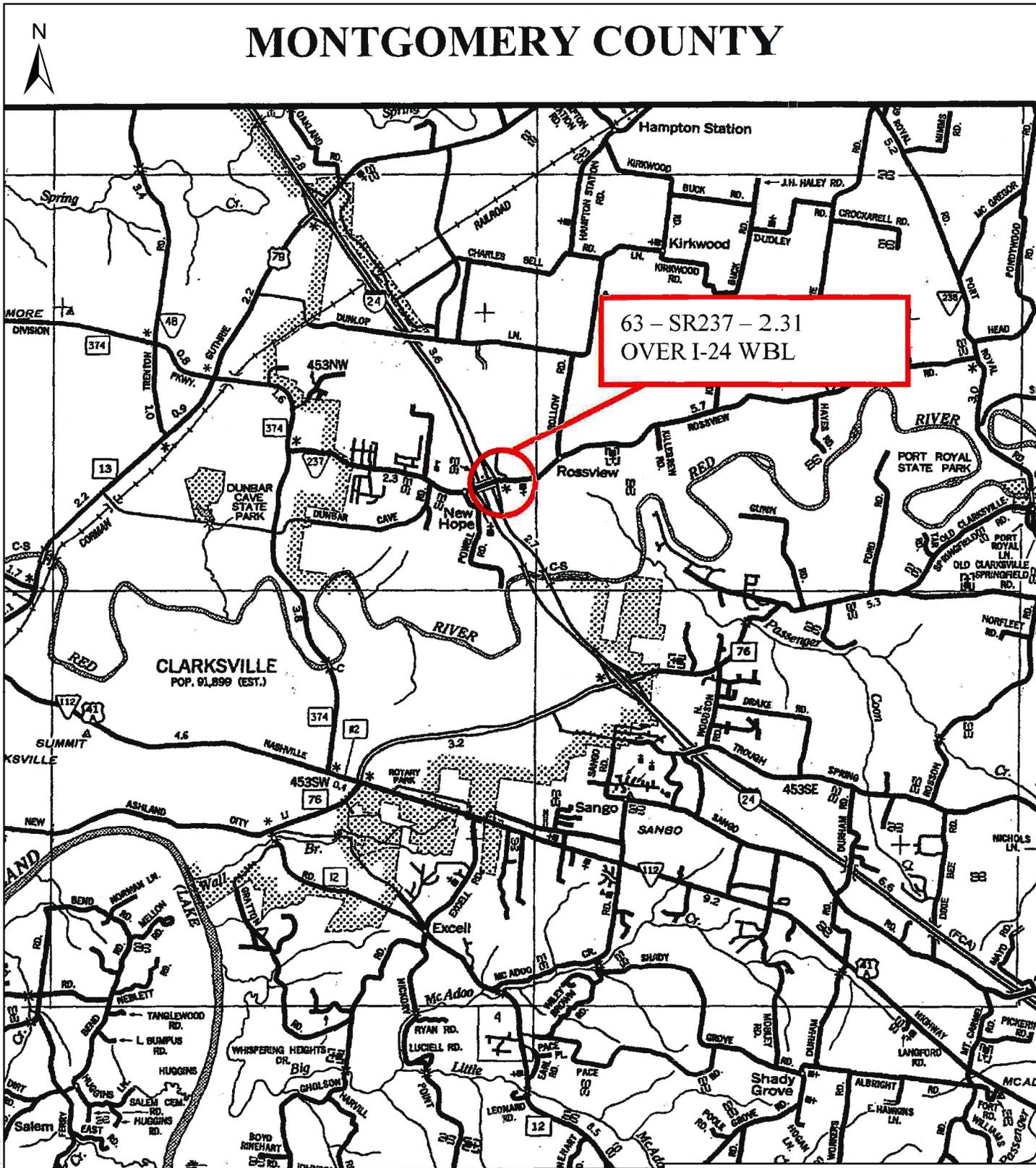
6.0 QUALIFICATIONS

The information presented herein is based on information obtained during the site visit(s) and from previous experience. If additional information becomes available which might impact our conclusions or recommendations, EnSafe requests the opportunity to review the information, reassess the potential concerns, and modify opinions, if warranted.

This report has been prepared on behalf of the Tennessee Department of Transportation. This document is not a Bid Document or a Contract Document. Use of this report or reliance upon information contained in this report by any other party implies an agreement by that party to the same terms and conditions under which service was provided. Furthermore, any party, other than our Client, relying on this document is cautioned that all conclusions made or decisions arrived at based on their review of this document are those solely of the third party, without warranty, guarantee or promise by the author. These findings are relevant to the dates of our services and should not be relied upon to represent conditions at substantially earlier or later dates.

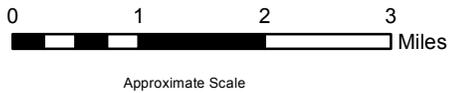
Figure – 1: Site Vicinity Map

MONTGOMERY COUNTY



63 - SR237 - 2.31
OVER I-24 WBL

Figure 1
Site Vicinity Map
Bridge 63I00240026
TDOT PE 63030-1209-04, PIN 119831.00
Montgomery County, Tennessee



REQUESTED BY: T. Keim
DRAWN BY: N. Rinehart
DATE: 11/1/2013
PROJECT NO: 0888814670



Source: Obtained from TDOT Bridge Inspection Reports; Used with permission from TDOT

APPENDIX A: ASBESTOS INSPECTION ACCREDITATIONS



THE STATE OF TENNESSEE

Department of Environment and Conservation Division of Solid Waste Management
Toxic Substances Program

William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 14th Floor Nashville TN 37243

By virtue of the authority vested by the Division of Solid Waste Management, the Company named below is hereby accredited to offer and/or conduct Asbestos activities pursuant to Rule 1200-01-20:

EnSafe

5724 Summer Trees Dr. Memphis TN, 38134

to conduct ASBESTOS ACTIVITIES in schools or public and commercial buildings in Tennessee. This firm is responsible for compliance with the applicable requirements of Rule 1200-01-20.

Discipline	Type	Accreditation Number	Effective Date	Expiration Date
Accreditation	Re-Accreditation	A-F-214-29290	August 01, 2013	August 31, 2014

Given under the Seal of the State of Tennessee in Nashville.

This 7th Day of August 2013

Division of Solid Waste Management
Toxic Substance Program



THE STATE OF TENNESSEE
Department of Environment and Conservation Toxic Substances Program



Robert A. Thomas

DOB	Sex	HGT	WGT
11-Oct-1976	M	6' 0"	165
Discipline	Accreditation	Expiration	
Inspector	A-148812-25747	Jan-31-2014	

Individual

Re-Accreditation

Date Issued: 3/11/2013

Asbestos Accreditation

APPENDIX B: PHOTOGRAPHS



Photo 1 HA-3 and HA-4– White asbestos skim coating on parapet wall.

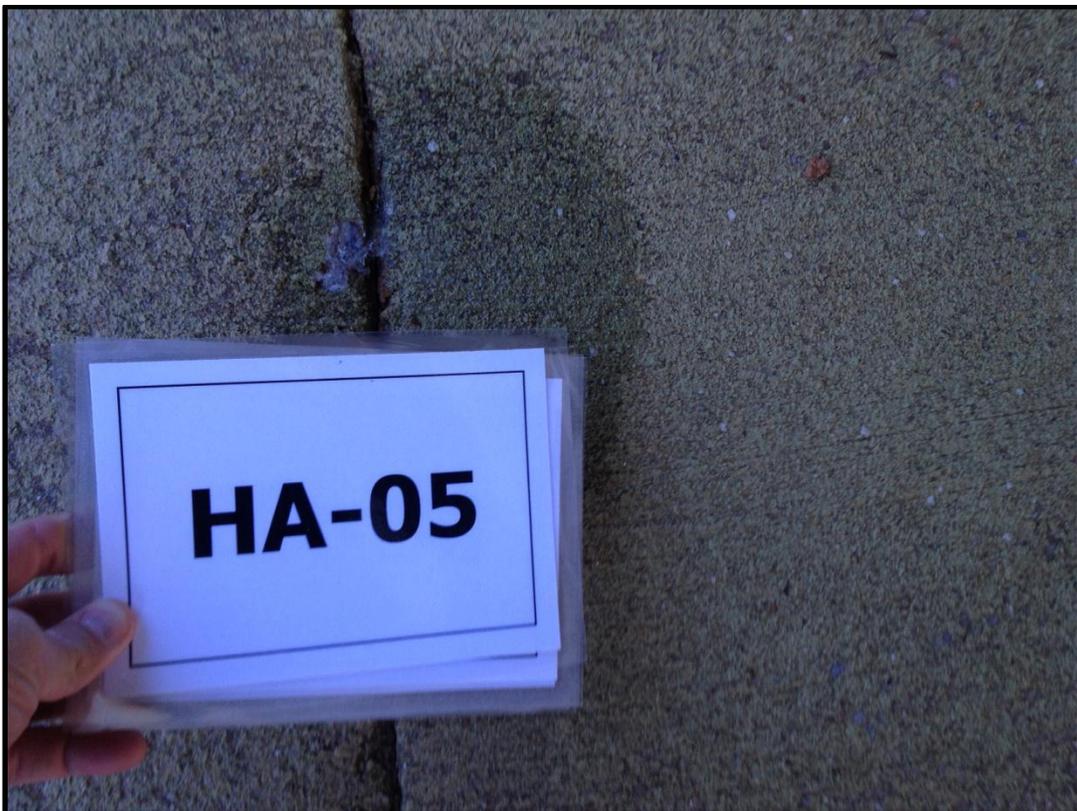


Photo 2: HA-5 – Asbestos coating on concrete slope.



Photo 3: HA-6 – Asbestos skim coat on abutment.



Photo 4: HA-7 – Asbestos skim coat on underside of bridge deck.

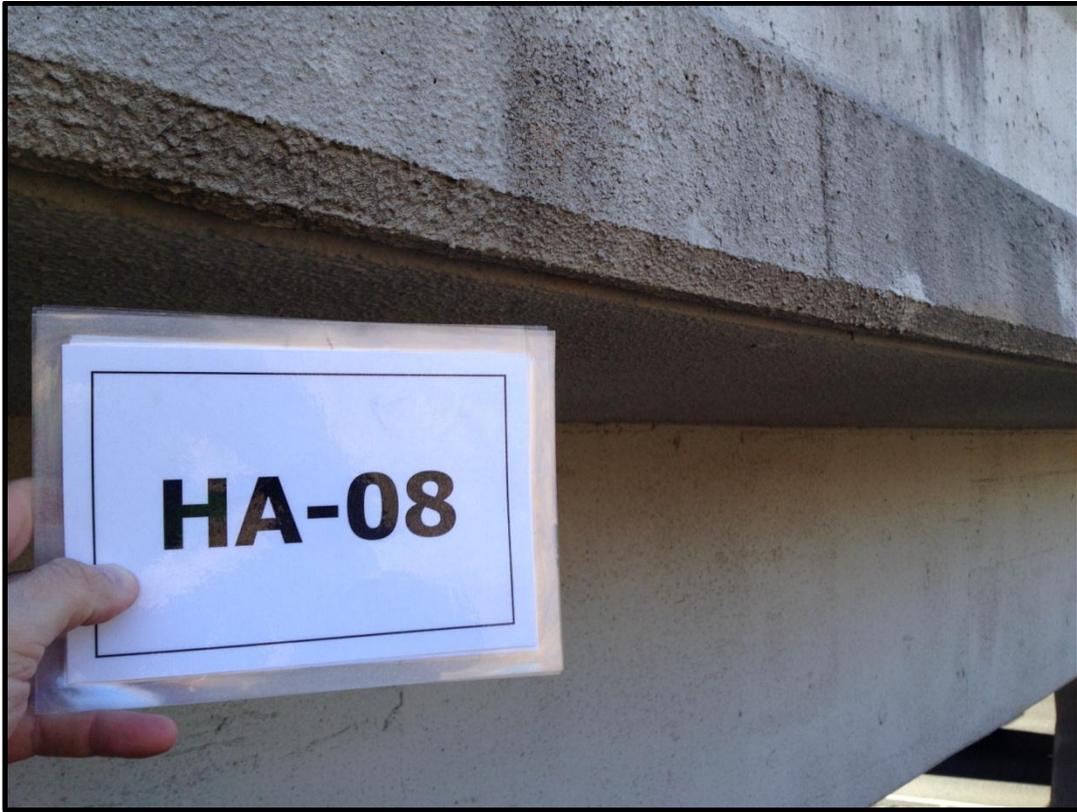


Photo 5: HA-8 – Asbestos skim coat on bridge overhang.



Photo 6: HA-9 – Asbestos skim coat on bridge columns.

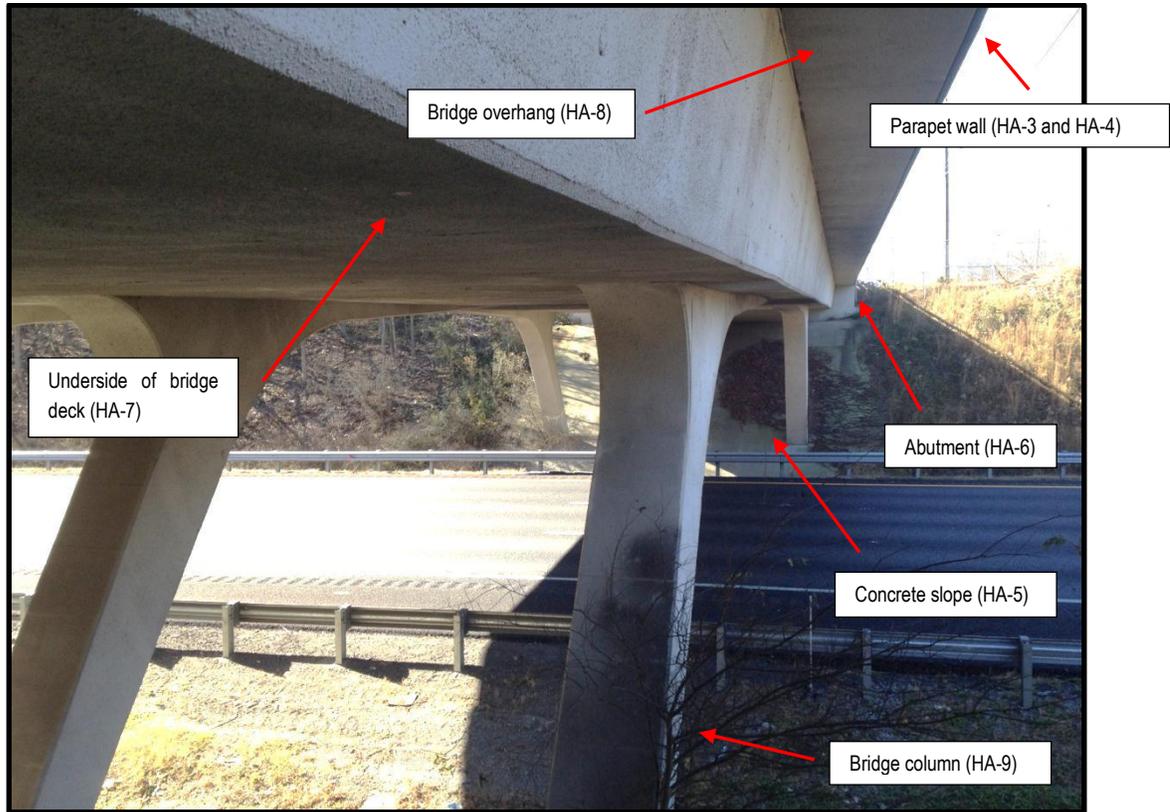


Photo 7: View of the asbestos-containing materials: parapet wall (HA-3), concrete slope (HA-5), abutment (HA-6), underside deck (HA-7), bridge overhang (HA-8), and bridge column (HA-9).

APPENDIX C: ASBESTOS SAMPLE LABORATORY ANALYSIS DATA



Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020



Customer: EnSafe- Nashville
220 Athens Way
Nashville TN 37228-1303

Attn: Robert Thomas

Lab Order ID: 1320842

Analysis ID: 1320842_PLM

Date Received: 11/15/2013

Project: TDOT-Montgomery SR237-26 Bridge

Date Reported: 11/26/2013

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
26HA1-A	Expansion joint	None Detected		100% Other	Gray Non Fibrous Homogeneous
1320842PLM_1					Ashed
26HA1-B	Expansion joint	None Detected		100% Other	Gray Non Fibrous Homogeneous
1320842PLM_2					Ashed
26HA2-A	Top of deck	None Detected		80% Other 20% Quartz	Gray, White Non Fibrous Heterogeneous
1320842PLM_3					Crushed
26HA2-B	Top of deck	None Detected		80% Other 20% Quartz	Gray, White Non Fibrous Heterogeneous
1320842PLM_4					Crushed
26HA2-C	Top of deck	None Detected		80% Other 20% Quartz	Gray, White Non Fibrous Heterogeneous
1320842PLM_5					Crushed
26HA3-A	Skim Coat on Parapet Wall	None Detected		100% Other	White Non Fibrous Heterogeneous
1320842PLM_6					Crushed
26HA3-B	Skim Coat on Parapet Wall	2% Chrysotile		98% Other	White, Yellow Non Fibrous Heterogeneous
1320842PLM_7					Crushed
26HA3-C	Skim Coat on Parapet Wall	2% Chrysotile		98% Other	White, Yellow Non Fibrous Heterogeneous
1320842PLM_8					Crushed

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommended that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAL. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Estimated MDL is 0.1%.

Sharon Donald (50)

Analyst

Approved Signatory



Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020



Customer: EnSafe- Nashville
220 Athens Way
Nashville TN 37228-1303

Attn: Robert Thomas

Lab Order ID: 1320842

Analysis ID: 1320842_PLM

Date Received: 11/15/2013

Project: TDOT-Montgomery SR237-26 Bridge

Date Reported: 11/26/2013

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
26HA4-A - A	Parapet wall	2% Chrysotile		98% Other	White, Yellow Non Fibrous Heterogeneous
1320842PLM_9	surfacing				Crushed
26HA4-A - B	Parapet wall	None Detected		80% Other 20% Quartz	Gray Non Fibrous Heterogeneous
1320842PLM_33	base				Crushed
26HA4-B - A	Parapet wall	2% Chrysotile		98% Other	White, Yellow Non Fibrous Heterogeneous
1320842PLM_10	surfacing				Crushed
26HA4-B - B	Parapet wall	None Detected		80% Other 20% Quartz	Gray Non Fibrous Heterogeneous
1320842PLM_34	base				Crushed
26HA4-C - A	Parapet wall	2% Chrysotile		98% Other	White, Yellow Non Fibrous Heterogeneous
1320842PLM_11	surfacing				Crushed
26HA4-C - B	Parapet wall	None Detected		80% Other 20% Quartz	Gray Non Fibrous Heterogeneous
1320842PLM_35	base				Crushed
26HA5-A - A	Concrete slope	2% Chrysotile		98% Other	Yellow, Green Non Fibrous Heterogeneous
1320842PLM_12	surfacing				Crushed
26HA5-A - B	Concrete slope	None Detected		80% Other 20% Quartz	Gray Non Fibrous Heterogeneous
1320842PLM_36	base				Crushed

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Sharon Donald (50)

Analyst

Approved Signatory



Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020



Customer: EnSafe- Nashville
220 Athens Way
Nashville TN 37228-1303

Attn: Robert Thomas

Lab Order ID: 1320842

Analysis ID: 1320842_PLM

Date Received: 11/15/2013

Project: TDOT-Montgomery SR237-26 Bridge

Date Reported: 11/26/2013

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
26HA5-B - A	Concrete slope	3% Chrysotile		97% Other	Yellow, Green Non Fibrous Heterogeneous
1320842PLM_13	surfacing				Crushed
26HA5-B - B	Concrete slope	None Detected		80% Other 20% Quartz	Gray Non Fibrous Heterogeneous
1320842PLM_37	base				Crushed
26HA5-C - A	Concrete slope	3% Chrysotile		97% Other	Yellow, Green Non Fibrous Heterogeneous
1320842PLM_14	surfacing				Crushed
26HA5-C - B	Concrete slope	None Detected		80% Other 20% Quartz	Gray Non Fibrous Heterogeneous
1320842PLM_38	base				Crushed
26HA6-A - A	Abutment	2% Chrysotile		98% Other	White, Yellow Non Fibrous Heterogeneous
1320842PLM_15	surfacing				Crushed
26HA6-A - B	Abutment	None Detected		80% Other 20% Quartz	Gray Non Fibrous Heterogeneous
1320842PLM_39	base				Crushed
26HA6-B - A	Abutment	2% Chrysotile		98% Other	White, Yellow Non Fibrous Heterogeneous
1320842PLM_16	surfacing				Crushed
26HA6-B - B	Abutment	None Detected		80% Other 20% Quartz	Gray Non Fibrous Heterogeneous
1320842PLM_40	base				Crushed

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommended that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Estimated MDL is 0.1%.

Sharon Donald (50)

Analyst

Approved Signatory



Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020



Customer: EnSafe- Nashville
220 Athens Way
Nashville TN 37228-1303

Attn: Robert Thomas

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Analysis ID: 1320842_PLM

Date Received: 11/15/2013

Date Reported: 11/26/2013

Project: TDOT-Montgomery SR237-26 Bridge

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
26HA6-C - A	Abutment	2% Chrysotile		98% Other	White, Yellow Non Fibrous Heterogeneous
1320842PLM_17	surfacing				Crushed
26HA6-C - B	Abutment	None Detected		80% Other 20% Quartz	Gray Non Fibrous Heterogeneous
1320842PLM_41	base				Crushed
26HA7-A - A	Bottom of deck	2% Chrysotile		98% Other	White, Yellow Non Fibrous Heterogeneous
1320842PLM_18	surfacing				Crushed
26HA7-A - B	Bottom of deck	None Detected		80% Other 20% Quartz	Gray Non Fibrous Heterogeneous
1320842PLM_42	base				Crushed
26HA7-B - A	Bottom of deck	3% Chrysotile		97% Other	White, Yellow Non Fibrous Heterogeneous
1320842PLM_19	surfacing				Crushed
26HA7-B - B	Bottom of deck	None Detected		80% Other 20% Quartz	Gray Non Fibrous Heterogeneous
1320842PLM_43	base				Crushed
26HA7-C - A	Bottom of deck	3% Chrysotile		97% Other	White, Yellow Non Fibrous Heterogeneous
1320842PLM_20	surfacing				Crushed
26HA7-C - B	Bottom of deck	None Detected		80% Other 20% Quartz	Gray Non Fibrous Heterogeneous
1320842PLM_44	base				Crushed

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Sharon Donald (50)

Analyst

Approved Signatory



Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020



Customer: EnSafe- Nashville
220 Athens Way
Nashville TN 37228-1303

Attn: Robert Thomas

Lab Order ID: 1320842

Analysis ID: 1320842_PLM

Date Received: 11/15/2013

Project: TDOT-Montgomery SR237-26 Bridge

Date Reported: 11/26/2013

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
26HA8-A - A	Overhang	3% Chrysotile		97% Other	White, Yellow Non Fibrous Heterogeneous
1320842PLM_21	surfacing				Crushed
26HA8-A - B	Overhang	None Detected		80% Other 20% Quartz	Gray Non Fibrous Heterogeneous
1320842PLM_45	base				Crushed
26HA8-B - A	Overhang	3% Chrysotile		97% Other	White, Yellow Non Fibrous Heterogeneous
1320842PLM_22	surfacing				Crushed
26HA8-B - B	Overhang	None Detected		80% Other 20% Quartz	Gray Non Fibrous Heterogeneous
1320842PLM_46	base				Crushed
26HA8-C - A	Overhang	2% Chrysotile		98% Other	White, Yellow Non Fibrous Heterogeneous
1320842PLM_23	surfacing				Crushed
26HA8-C - B	Overhang	None Detected		80% Other 20% Quartz	Gray Non Fibrous Heterogeneous
1320842PLM_47	base				Crushed
26HA9-A - A	Column	2% Chrysotile		98% Other	White, Yellow Non Fibrous Heterogeneous
1320842PLM_24	surfacing				Crushed
26HA9-A - B	Column	None Detected		80% Other 20% Quartz	Gray Non Fibrous Heterogeneous
1320842PLM_48	base				Crushed

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Sharon Donald (50)

Analyst

Approved Signatory



Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020



Customer: EnSafe- Nashville
220 Athens Way
Nashville TN 37228-1303

Attn: Robert Thomas

Lab Order ID: 1320842

Analysis ID: 1320842_PLM

Date Received: 11/15/2013

Project: TDOT-Montgomery SR237-26 Bridge

Date Reported: 11/26/2013

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
26HA9-B - A	Column	2% Chrysotile		98% Other	White, Yellow Non Fibrous Heterogeneous
1320842PLM_25	surfacing				Crushed
26HA9-B - B	Column	None Detected		80% Other 20% Quartz	Gray Non Fibrous Heterogeneous
1320842PLM_49	base				Crushed
26HA9-C - A	Column	2% Chrysotile		98% Other	White, Yellow Non Fibrous Heterogeneous
1320842PLM_26	surfacing				Crushed
26HA9-C - B	Column	None Detected		80% Other 20% Quartz	Gray Non Fibrous Heterogeneous
1320842PLM_50	base				Crushed
26HA10-A	Abutment fiberboard	None Detected	85% Cellulose	15% Other	Black Fibrous Heterogeneous
1320842PLM_27					Teased
26HA10-B	Abutment fiberboard	None Detected	85% Cellulose	15% Other	Black Fibrous Heterogeneous
1320842PLM_28					Teased
26HA10-C	Abutment fiberboard	None Detected	85% Cellulose	15% Other	Black Fibrous Heterogeneous
1320842PLM_29					Teased
26HA11-A	Column fiberboard	None Detected	85% Cellulose	15% Other	Black Fibrous Heterogeneous
1320842PLM_30					Teased

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Sharon Donald (50)

Analyst

Approved Signatory



Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020



Customer: EnSafe- Nashville
220 Athens Way
Nashville TN 37228-1303

Attn: Robert Thomas

Lab Order ID: 1320842

Analysis ID: 1320842_PLM

Date Received: 11/15/2013

Date Reported: 11/26/2013

Project: TDOT-Montgomery SR237-26 Bridge

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
26HA11-B	Column fiberboard	None Detected	85% Cellulose	15% Other	Black Fibrous Heterogeneous
1320842PLM_31					Teased
26HA11-C	Column fiberboard	None Detected	85% Cellulose	15% Other	Black Fibrous Heterogeneous
1320842PLM_32					Teased

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Sharon Donald (50)

Analyst

Approved Signatory

1320842

Client: EnSafe
 Contact: Robert Thomas
 Address: 220 Athens Way Nashville, TN
 Phone: 615-265-2600
 Fax:
 Email: rthomas@ensafe.com

Project: TDOT-Montgomery SR237 - 26 Bridge

Client Notes:

P.O. #: 15894

Date Submitted: 11/14/2013 17:00:00 PM

Analysis: ACM by PLM

TurnAroundTime: 10 day

***Instructions:**
 Use Column "B" for your contact info

To See an Example Click the bottom Example Tab.

Enter samples between "<<" and ">>"
 Begin Samples with a "<<" above the first sample and end with a ">>" below the last sample.
 Only Enter your data on the first sheet "Sheet1"

Note: Data 1 and Data 2 are optional fields that do not show up on the official report, however they will be included in the electronic data returned to you to facilitate your reintegration of the report data.

Scientific Analytical Institute



4604 Dundas Drive
 Greensboro, NC 27407
 Phone: 336.292.3888
 Fax: 336.292.3313
 Email: lab@sailab.com

Sample Number	Data 1	Sample Description	Data 2
<<			
26HA1-A		Expansion joint	
26HA1-B		Expansion joint	
26HA2-A		Top of deck	
26HA2-B		Top of deck	
26HA2-C		Top of deck	
26HA3-A		Skim Coat on Parapet Wall	
26HA3-B		Skim Coat on Parapet Wall	
26HA3-C		Skim Coat on Parapet Wall	
26HA4-A		Parapet wall	
26HA4-B		Parapet wall	
26HA4-C		Parapet wall	
26HA5-A		Concrete slope	
26HA5-B		Concrete slope	
26HA5-C		Concrete slope	
26HA6-A		Abutment	
26HA6-B		Abutment	
26HA6-C		Abutment	
26HA7-A		Bottom of deck	
26HA7-B		Bottom of deck	
26HA7-C		Bottom of deck	
26HA8-A		Overhang	
26HA8-B		Overhang	
26HA8-C		Overhang	
26HA9-A		Column	
26HA9-B		Column	
26HA9-C		Column	
26HA10-A		Abutment fiberboard	
26HA10-B		Abutment fiberboard	
26HA10-C		Abutment fiberboard	
26HA11-A		Column fiberboard	
26HA11-B		Column fiberboard	
26HA11-C		Column fiberboard	
>>			

Robert Thomas 11/14/13 1540

Accepted
 Rejected

Cherry
 11-15-13