BRIDGE I-974 N/S

HAZARDOUS MATERIALS SURVEY

BRIDGE INSPECTION AND SURVEY FOR PRESENCE OF ASBESTOS AND HEAVY METAL(S), JANUARY 2021

NDOT Hazardous Materials Section, Environmental Division
1263 South Stewart Drive
Carson City, NV 89712

EXECUTIVE SUMMARY

The inspection (survey) for hazardous materials was conducted on both North and South bridges of I-974 on January 21, 2021 by NDOT personnel from the Hazardous Materials section, of the Environmental Division. The bridges were evaluated for both asbestos containing materials (ACM) and heavy metals in painted coating materials. Nineteen suspect asbestos samples were collected with results and considerations summarized below:

- No ACMs were identified
- No heavy metal containing coating materials were identified.

1.0 INTRODUCTION

NDOT conducted an asbestos survey and screening for metals-based coating materials on the following two bridge structures located in Clark county:

- I-974 N (Riverside/Bunkerville Interchange, Northbound I-15)
- I-974 S (Riverside/Bunkerville Interchange, Southbound I-15)

The survey was conducted on January 21, 2021 by NDOT personnel. Due to the similarities between the two bridges; including design, construction materials, date of construction, similar wear patterns and maintenance activities, bridges were surveyed collectively, and findings presented herein, shall apply to both bridges, despite their physical separation.

Suspect Asbestos Containing Material (ACM) were identified and appropriately sampled. Suspect coating materials, if present, were sampled and analyzed for the Resource Recovery and Conservation Act eight (RCRA 8) metals.

Bulk asbestos samples were analyzed by a National Voluntary Laboratory Accredited laboratory by polarized light microscopy (PLM). Metals analysis was conducted by a Nevada Certified Lab. The results of the laboratory analysis are attached as Appendix C and Appendix D, respectively.

2.0 BRIDGE DESCRIPTION

Bridges I-974 N/S were both constructed in 1966. Bridges in their entirety are constructed of concrete to include piers (columns), pier caps, backwall/stem wall, wing walls, parapet, cementous textured material throughout bridges, and bridge deck overlain with asphaltic concrete. Two types of fibrous expansion joints were identified as well.

3.0 FIELD ACTIVITIES

The survey was conducted by NDOT personnel, appropriately licensed Asbestos and Hazardous Emergency Response Act (AHERA) accredited asbestos inspectors. The survey was conducted in general accordance with the sample collection protocols established in EPA regulation 40 CFR 763. A summary of the survey activities performed is discussed below. Copies of AHERA certifications and licenses for NDOT personnel conducting the survey are provided as Appendix E.

3.1 Visual and Physical Assessment

Survey activities began with a visual observation of the structures to identify homogeneous areas of suspect ACM and presence of coating materials. A physical assessment of each homogeneous area of suspect ACM was conducted to assess the friability and condition of the materials.

The homogeneous areas identified during the visual survey, the presence of coating materials, and sample identifiers are summarized in Table 1.

Table 1 - Bridge Component Descriptions

Homogeneous Area	Description	Sample IDs
A	wing wall	WW-1, WW-2, WW-3
B	concrete bridge deck	DECK-1, DECK-2, DECK-3
C	stem wall / back wall	STEM-1, STEM-2, STEM-3
D	brown fibrous expansion joint	EXP-1
E	brown fibrous expansion joint	EXP-2
F	parapet	PARA-1, PARA-2, PARA-3
G	concrete piers (columns) and pier caps	COL-1, COL-2, COL-3
H	grey cementous texture coating material	TXT-1
I	grey cementous texture coating material	TXT-2

notes: (1) none.

3.2 Sample Collection

Based on results of the visual observation, bulk samples of suspect ACM and coating materials were collected in general accordance with AHERA sampling protocols. Representative samples of suspect materials were collected in each homogeneous area. Samples were placed in new sealable containers and labeled with unique sample numbers.

3.3 Sample Analysis

Bulk samples of ACM were submitted under chain of custody to Asbestos TEM Laboratories for analysis by PLM. The percentage of asbestos, where applicable, was determined by microscopic visual estimation. Coating material samples, if suspected of heavy metals, were also submitted to Alpha Analytical and analyzed for heavy metals using EPA 6020 test method.

A discussion of suspect ACM and suspect metals-based coating samples collected during the survey and findings are included in Section 6.0.

4.0 PLAN REVIEW

Design plans did not need review.

5.0 REGULATORY OVERVIEW

5.1 Asbestos Regulations

NESHAP (40 CFR Part 61, Subpart M) regulates asbestos fiber emissions and asbestos waste disposal practices. It also requires the identification and classification of existing building materials prior to demolition or renovation activity. Under NESHAP, asbestos-containing building materials are classified as either friable, Category I non-friable, or Category II non- friable ACM. Category I non-friable ACM includes packings, gaskets, resilient floor coverings and asphalt roofing products containing more than 1% asbestos. Category II non-friable ACM are any materials other than Category I materials that contain more than 1% asbestos.

Friable ACM, Category I and Category II non-friable ACM which are in poor condition and have become friable or which will be subjected to drilling, sanding, grinding, cutting or abrading and which could be crushed or pulverized during anticipated renovation or demolition activities are considered Regulated ACM (RACM).

5.2 Coating Material and Lead Based Paint Regulations

Lead-based paint (LBP) is defined as a surface coating or paint containing lead in excess of 0.5% (5000 mg/Kg) by weight (EPA Toxic Substance Control Act, Section 401).

Under EPA regulations heavy metal impacted wastes generated during abatement activities are handled as either a solid waste or a hazardous waste, depending on the concentration of each of the metal(s) and the method of coating material removal.

6.0 FINDINGS AND RECOMMENDATIONS

6.1 Suspect Asbestos Containing Materials

A total of nineteen bulk samples were collected from nine homogeneous areas of suspect ACM. No Asbestos Containing Materials were identified.

A bridge Location Map is included in Appendix A. A photographic log showing homogenous areas is presented in Appendix B. Asbestos analytical results are included in Appendix C. A summary of the suspect ACMs identified is provided in Table 2.

Table 2 – Summary of Suspected ACM

Homogeneous Sampling Area	Sample Number	Material Description/Sample Location	Asbestos Results[1], %	NESHAP Category[2]	Friability[3]
A	WW-1	wing wall	Not detected	N/A	non-friable
	WW-2				
	WW-3				
B	DECK-1	concrete bridge deck	Not detected	N/A	non-friable
	DECK-2				
	DECK-3				
C	STEM-1	stem wall / back wall	Not detected	N/A	non-friable
	STEM-2				
	STEM-3				
D	EXP-1	brown fibrous expansion joint	Not detected	N/A	friable
E	EXP-2	brown fibrous expansion joint	Not detected	N/A	friable
F	PARA-1	parapet	Not detected	N/A	non-friable
	PARA-2				
	PARA-3				
G	COL-1	piers (columns), pier caps	Not detected	N/A	non-friable
	COL-2				
	COL-3				
H	TXT-1	cementous coating texture material, parapet (composite)	Not detected	N/A	non-friable
I	TXT-2	cementous coating texture material, parapet (composite)	Not detected	N/A	non-friable

notes: (1) PLM unless otherwise noted.
(2) NESHAAP category I, category II, RACM, or (N/A) not applicable.
(3) Friable materials are those that, when dry, may be crumbled, pulverized or reduced to powder by hand pressure.

Additional suspect materials, other than those identified during the survey, could exist within the structures in areas not accessible to the inspector at the time of the survey. Should suspect materials other than those identified during this survey be uncovered during the renovation/demolition process, those materials should be assumed to be ACM until sampling and analysis can confirm or refute this assumption.

6.2 Coating Materials

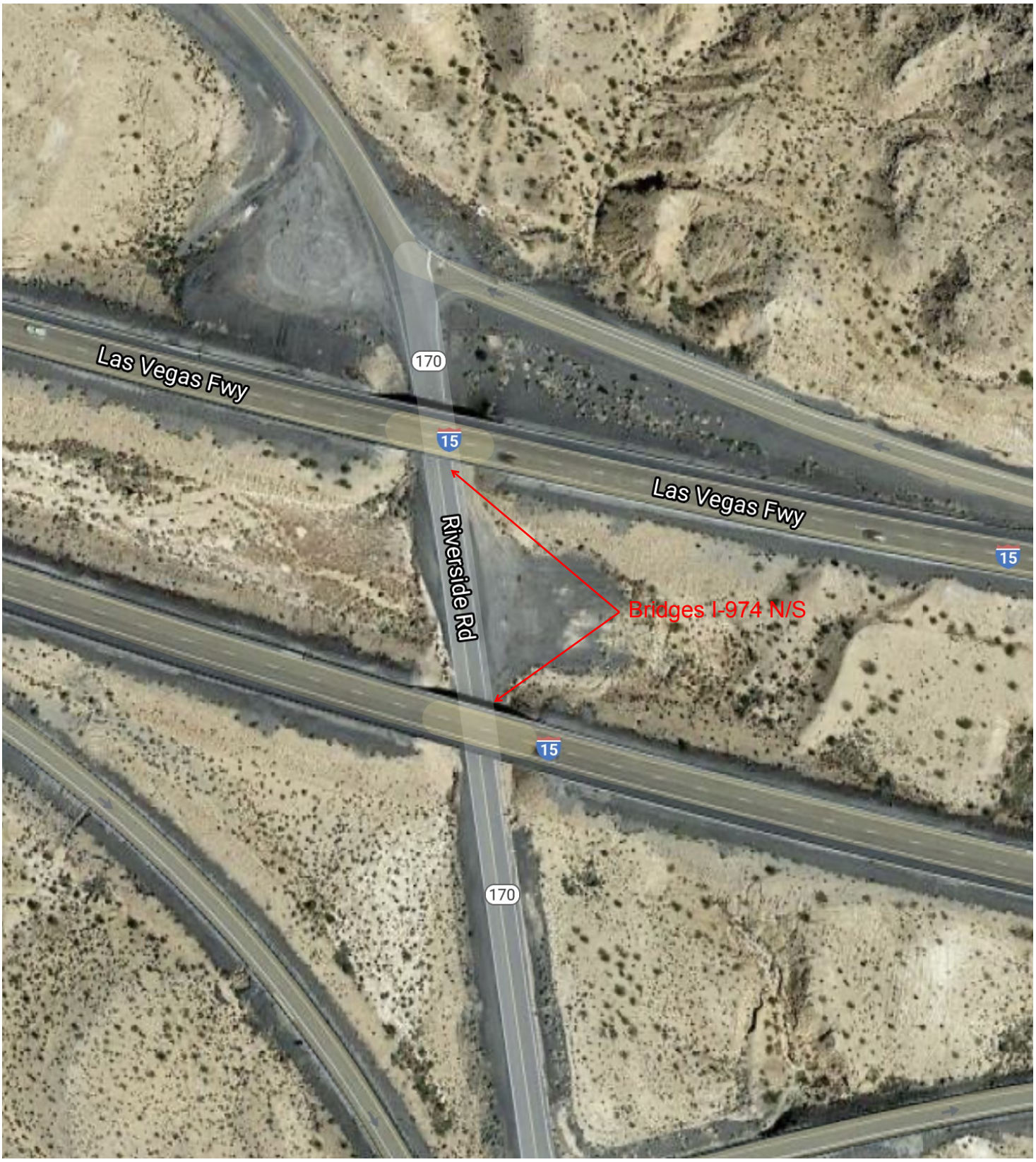
Two composite texture samples from the grey cementous coating material applied throughout the bridges identified as “TXT-1” and “TXT-2” were collected. However, this material is primarily cementous and does not contain heavy metals and was only sampled for the presence of asbestos. Experience has shown that method to remove coating material results in a disproportional concentration of concrete to coating materials. Consequently, heavy metal detections, if found, are more a reflection of the concrete matrix than coating material.

6.3 Recommendations

As there were no ACMs identified, there are no recommendations at this time.

Appendix A
Bridge Location Map

Bridges I-974 N/S
Riverside/Bunkerville Interchange, I-15
Clark County, Nevada



Appendix B
Bridge Photo Log

PHOTOGRAPHIC DOCUMENTATION

NDOT Hazardous Materials Survey
Bridge I-974 N/S
I-15
Clark County, Nv

PHOTO 1

DATE:
1/21/2021

DIRECTION:
North

TAKEN BY:
Brian Reed

DESCRIPTION:
Bridges I-974 North & South.

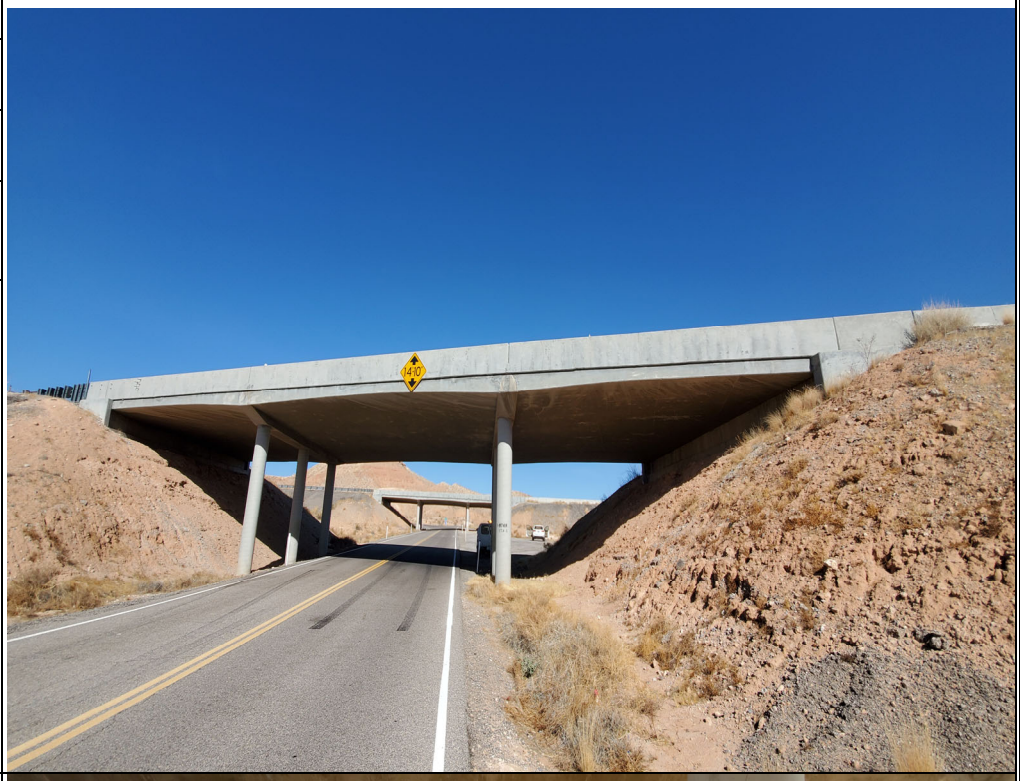


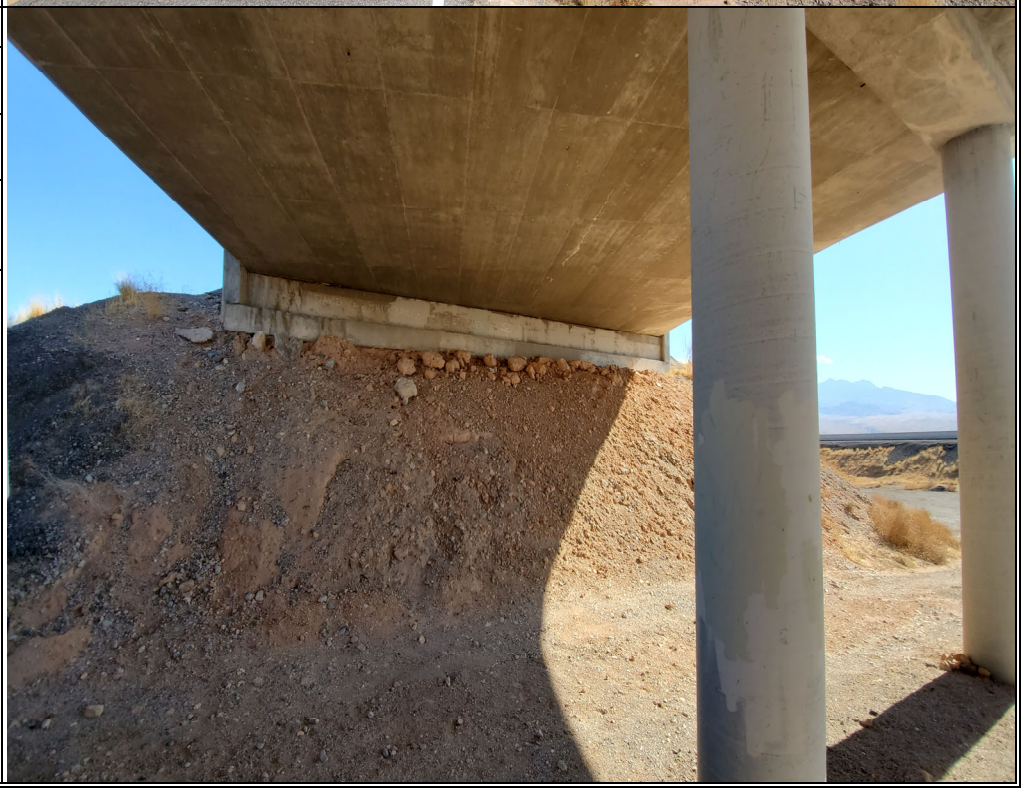
PHOTO 2

DATE:
1/21/2021

DIRECTION:
East

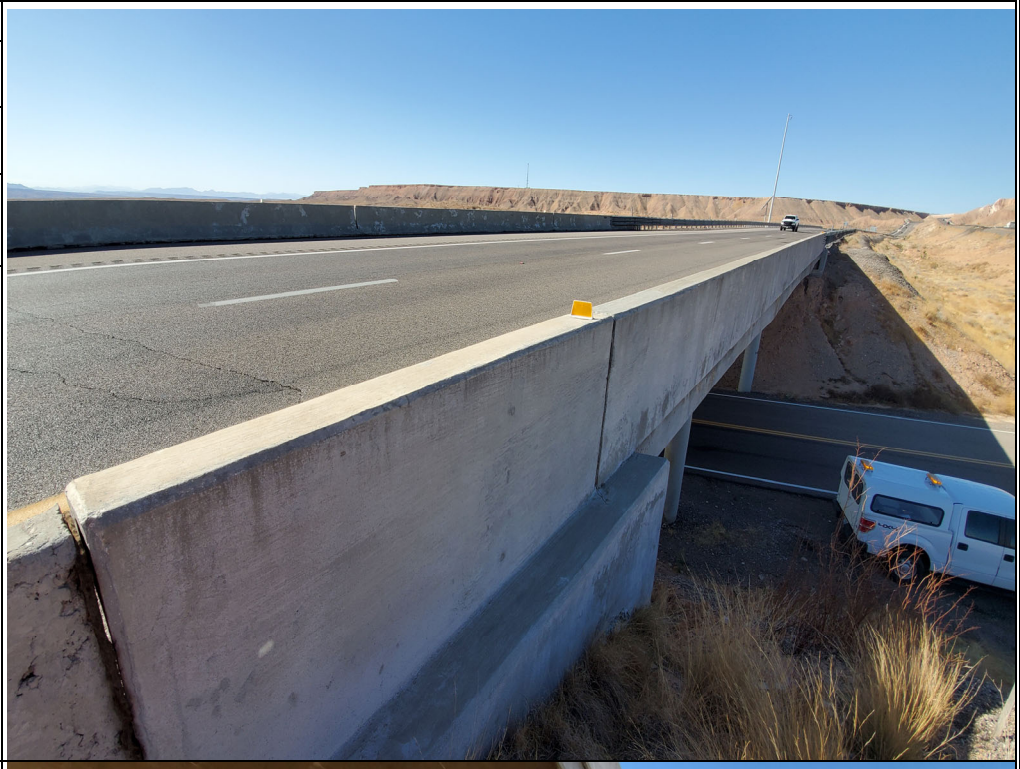
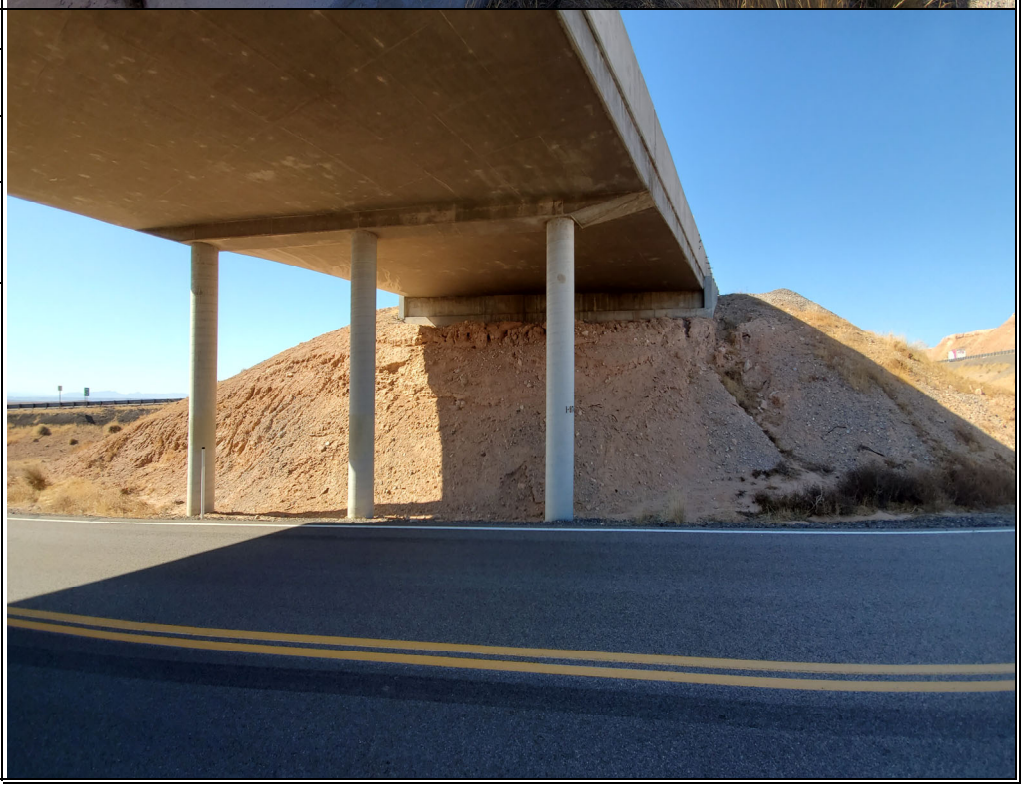
TAKEN BY:
Brian Reed

DESCRIPTION:
Stemwall, and support columns.



PHOTOGRAPHIC DOCUMENTATION

NDOT Hazardous Materials Survey
Bridge I-974 N/S
I-15
Clark County, Nv

PHOTO 3 **DATE:** 1/21/2021 **DIRECTION:** West **TAKEN BY:** Brian Reed **DESCRIPTION:** Parapet, wingwall, and mainlane.	
PHOTO 4 **DATE:** 1/21/2021 **DIRECTION:** West **TAKEN BY:** Brian Reed **DESCRIPTION:** Support columns and underside of bridge.	

Appendix C
Asbestos Sample(s)
Analytical Results

ASBESTOS TEM LABORATORIES, INC.

EPA Method 600/R-93/116
Polarized Light Microscopy
Analytical Report

Report No. 143618

1350 Freeport Blvd., Unit 104
Sparks, NV 89431
(775) 359-3377
FAX (775) 359-2798

Main Office Located At:
3431 Ettie Street Oakland, CA 94608
Ph. (510) 704-8930 Fax (510) 704-8929

ASBESTOS TEM LABORATORIES, INC

NVLAP Lab Code 200104-0

Jan-29-21

Robert Piekarz
Nevada Department of Transportation
1263 South Stewart Street
Carson City, NV 89712

RE: LABORATORY JOB # 9092-00048
Polarized light microscopy analytical results for 19 bulk sample(s).
Job Site: D1 I-15
Job No.:
Report No.: 143618

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with EPA Method 600/R-93/116 or 600/M4-82-020 for the determination of asbestos in bulk building materials by polarized light microscopy (PLM). Please note that while PLM analysis is commonly performed on non-friable and fine grained materials such as floor tiles and dust, the EPA method recognizes that PLM is subject to limitations. In these situations, accurate results may only be obtainable through the use of more sophisticated and accurate techniques such as transmission electron microscopy (TEM) or X-ray diffraction (XRD).

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Each sample is opened in a class 100 HEPA negative air hood. A representative sampling of the material is selected and placed onto a glass microscope slide containing a drop of refractive index oil. The glass slide is placed under a polarizing light microscope where standard mineralogical techniques are used to analyze and quantify the various materials present, including asbestos. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

Please note all samples will be held for 3 months from the date of receipt unless otherwise requested by client.

Sincerely Yours,

Laboratory Analyst
ASBESTOS TEM LABORATORIES, INC.

NVLAP Lab Code 200104-0

POLARIZED LIGHT MICROSCOPY ANALYTICAL REPORT

EPA Method 600/R-93/116 or 600/M4-82-020

Contact: Robert Piekarz

Address: Nevada Department of
1263 South Stewart Street
Carson City, NV 89712

Samples Indicated: 19
Reg. Samples Analyzed: 19
Split Layers Analyzed: 0

Job Site / No. D1 I-15

Report No. **143618**
Date Submitted: Jan-22-21
Date Reported: Jan-29-21

SAMPLE ID	ASBESTOS % TYPE	OTHER DATA 1) Non-Asbestos Fibers 2) Matrix Materials 3) Date/Time Collected 4) Date Analyzed	DESCRIPTION FIELD / LAB
WW-1	**None Detected**	1) None Detected 2) 99-100% Calc, Qtz, Opq	Grey concrete - wing wall
Lab ID # 9092-00048-001		3) 1-21-21 4) Jan-29-21	Concrete-Grey
WW-2	**None Detected**	1) None Detected 2) 99-100% Calc, Qtz, Opq *Fib.Op.Prop. Same as in*	Grey concrete - wing wall
Lab ID # 9092-00048-002		3) 4) Jan-29-21	Concrete-Grey
WW-3	**None Detected**	1) None Detected 2) 99-100% Calc, Qtz, Opq *Fib.Op.Prop. Same as in*	Grey concrete - wing wall
Lab ID # 9092-00048-003		3) 1-21-21 4) Jan-29-21	Concrete-Grey
DECK-1	**None Detected**	1) None Detected 2) 99-100% Calc, Qtz, Opq *Fib.Op.Prop. Same as in*	Grey concrete - deck/ murnlone(?)
Lab ID # 9092-00048-004		3) 1-21-21 4) Jan-29-21	Concrete-Grey
DECK-2	**None Detected**	1) None Detected 2) 99-100% Calc, Qtz, Opq *Fib.Op.Prop. Same as in*	Grey concrete - deck/ murnlone(?)
Lab ID # 9092-00048-005		3) 1-21-21 4) Jan-29-21	Concrete-Grey
DECK-3	**None Detected**	1) None Detected 2) 99-100% Calc, Qtz, Opq *Fib.Op.Prop. Same as in*	Grey concrete - deck/ murnlone(?)
Lab ID # 9092-00048-006		3) 1-21-21 4) Jan-29-21	Concrete-Grey
STEM-1	**None Detected**	1) None Detected 2) 99-100% Calc, Qtz, Opq *Fib.Op.Prop. Same as in*	Grey concrete - stem wall
Lab ID # 9092-00048-007		3) 1-21-21 4) Jan-29-21	Concrete-Grey
STEM-2	**None Detected**	1) None Detected 2) 99-100% Calc, Qtz, Opq *Fib.Op.Prop. Same as in*	Grey concrete - stem wall
Lab ID # 9092-00048-008		3) 1-21-21 4) Jan-29-21	Concrete-Grey
STEM-3	**None Detected**	1) None Detected 2) 99-100% Calc, Qtz, Opq *Fib.Op.Prop. Same as in*	Grey concrete - stem wall
Lab ID # 9092-00048-009		3) 1-21-21 4) Jan-29-21	Concrete-Grey
EXP-1	**None Detected**	1) 70-80% Cellulose 2) 20-30% Opq	Brown fiberboard - expansion joints
Lab ID # 9092-00048-010		3) 1-21-21 4) Jan-29-21	Fiberboard-Brown

Limit of quantitation of method is estimated to be 1% asbestos using a visual area estimation technique. Split samples are inhomogeneous.

Laboratory Analyst Greg Hanes

NVLAP Lab Code 200104-0

POLARIZED LIGHT MICROSCOPY ANALYTICAL REPORT

EPA Method 600/R-93/116 or 600/M4-82-020

Contact: Robert Piekarz

Address: Nevada Department of
1263 South Stewart Street
Carson City, NV 89712

Samples Indicated: 19
Reg. Samples Analyzed: 19
Split Layers Analyzed: 0

Job Site / No. D1 I-15

Report No. **143618**
Date Submitted: Jan-22-21
Date Reported: Jan-29-21

SAMPLE ID	ASBESTOS % TYPE	OTHER DATA 1) Non-Asbestos Fibers 2) Matrix Materials 3) Date/Time Collected 4) Date Analyzed	DESCRIPTION FIELD / LAB
EXP-2	**None Detected**	1) 70-80% Cellulose 2) 20-30% Opq *Fib.Op.Prop. Same as in*	Brown fiberboard - expansion joints
Lab ID # 9092-00048-011		3) 1-21-21 4) Jan-29-21	Fiberboard-Brown
PARA-1	**None Detected**	1) None Detected 2) 99-100% Opq, Qtz, Calc	Grey concrete - parapet
Lab ID # 9092-00048-012		3) 1-21-21 4) Jan-29-21	Concrete-Grey
PARA-2	**None Detected**	1) None Detected 2) 99-100% Opq, Qtz, Calc *Fib.Op.Prop. Same as in*	Grey concrete - parapet
Lab ID # 9092-00048-013		3) 1-21-21 4) Jan-29-21	Concrete-Grey
PARA-3	**None Detected**	1) None Detected 2) 99-100% Opq, Qtz, Calc *Fib.Op.Prop. Same as in*	Grey concrete - parapet
Lab ID # 9092-00048-014		3) 1-21-21 4) Jan-29-21	Concrete-Grey
COL-1	**None Detected**	1) None Detected 2) 99-100% Opq, Qtz, Calc *Fib.Op.Prop. Same as in*	Grey concrete - column/ piers
Lab ID # 9092-00048-015		3) 1-21-21 4) Jan-29-21	Concrete-Grey
COL-2	**None Detected**	1) None Detected 2) 99-100% Opq, Qtz, Calc *Fib.Op.Prop. Same as in*	Grey concrete - column/ piers
Lab ID # 9092-00048-016		3) 1-21-21 4) Jan-29-21	Concrete-Grey
COL-3	**None Detected**	1) None Detected 2) 99-100% Opq, Qtz, Calc *Fib.Op.Prop. Same as in*	Grey concrete - column/ piers
Lab ID # 9092-00048-017		3) 1-21-21 4) Jan-29-21	Concrete-Grey
TXT-1	**None Detected**	1) None Detected 2) 99-100% Calc, Opq	Grey texturing - throughout bridge
Lab ID # 9092-00048-018		3) 1-12-21 4) Jan-29-21	Texture-Grey
TXT-2	**None Detected**	1) None Detected 2) 99-100% Calc, Opq *Fib.Op.Prop. Same as in*	Grey texturing - throughout bridge
Lab ID # 9092-00048-019		3) 1-21-21 4) Jan-29-21	Texture-Grey
Lab ID #		1) 2) 3) 4)	

Limit of quantitation of method is estimated to be 1% asbestos using a visual area estimation technique. Split samples are inhomogeneous.

Laboratory Analyst Greg Hanes

Nevada Department of Transportation
1263 S. Stewart St
Carson City, NV 89701

Survey Data

Inspectors: Brian Reed/Robert Piekarz	Project Name: Bridge F-974 N/S	Project Number:	Date Sampled: 1/21/21
Phone: 775-888-7892 Fax: 775-888-7104	Project Location: DI - I-15	Analysis Type: Abestos	Air (Bulk)
Turn-A-Round Time: Rush 24-Hour ~~2 Day~~	Requests: Verbals Fax	Test to First Positive:	Yes (No)

Lab #	Sample ID	Material Description	Sample Location	Location of Materials	Quantity	Condition	Friable	Asbestos %
	1 WW-1	grey concrete	Wingwall	Bridge I 974 N/S	1	G	N	
	2 WW-2	↓	↓	↓	1	G	N	
	3 WW-3	↓	↓	↓	1	G	N	
	4 Deck-1	↓	Deck / Main lane	↓	1	G	N	
	5 Deck-2	↓	↓	↓	1	G	N	
	6 Deck-3	↓	↓	↓	1	G	N	
	7 Stem-1	↓	Stem wall	↓	1	G	N	
	8 Stem-2	↓	↓	↓	1	G	N	
	9 Stem-3	↓	↓	↓	1	G	N	
	10 Exp-1	Brown Fiberboard	Expansion Joints	↓	1	G	N	

Comments/Additional Information

MATERIAL			CONDITION	UNITS	ASBESTOS %
PFI - Pipe Fitted Insulation	VT - Vinyl Tile	GA - Gasket	G - Good	LF - Linear Feet	A - Asmosite Asbestos
PRI - Pipe Run Insulation	M - Mastic	D - Debris	D - Damaged	SF - Square Feet	C - Chrysotile Asbestos
DI - Duct Insulation	CBM - Cove Base Mastic	TSI - Thermal System	SD - Significant Damage	CF - Cubic Feet	NDA - No Asbestos Detected
TI - Tank Insulation	AT - Acoustical Tile	Insulation			Assumed ACM - No Samples Taken
EJ - Expansion Joint	SA - Spray Acoustic	R - Roof			
BI - Boiler Insulation	W- Wall	DW - Drywall			
	P - Plaster	JC - Joint Compound			

Relinquished By: [signature]	Relinquished By:	Relinquished By:
Date/Time : 1/22/21	Date/Time : 1/22/21 10:55 AM	Date/Time :
Received By:	Received By: Andrew Stroud ATEM	Received By:

Nevada Department of Transportation
1263 S. Stewart St
Carson City, NV 89701

Survey Data

Inspectors: Brian Reed/Robert Piekarz	Project Name: Bridge I-974 N/S	Project Number:	Date Sampled: 1/21/21
Phone: 775-888-7892 Fax: 775-888-7104	Project Location:	Analysis Type: Abestos	Air (Bulk)
Turn-A-Round Time: Rush 24-Hour (2-Day)	Requests: Verbals Fax	Test to First Positive:	Yes (No)

Lab #	Sample ID	Material Description	Sample Location	Location of Materials	Quantity	Condition	Friable	Asbestos %
	1 Exp-2	Brown Fiberboard	Expansion Joints	Bridge 974 N/S	1	G	N	
	2 Para-1	grey concrete	Parapet		1	G	N	
	3 Para-2	↓	↓		1	G	N	
	4 Para-3	↓	↓		1	G	N	
	5 Col-1	↓	column/piers		1	G	N	
	6 Col-2	↓	↓		1	G	N	
	7 Col-3	↓	↓		1	G	N	
	8 Txt-1	grey texturing	throughout Bridge		1	G	N	
	9 Txt-2	↓	↓	↓	1	G	N	
	10							

Comments/Additional Information

MATERIAL			CONDITION	UNITS	ASBESTOS %
PFI - Pipe Fitted Insulation	VT - Vinyl Tile	GA - Gasket	G - Good	LF - Linear Feet	A - Asmosite Asbestos
PRI - Pipe Run Insulation	M - Mastic	D - Debris	D - Damaged	SF - Square Feet	C - Chrysotile Asbestos
DI - Duct Insulation	CBM - Cove Base Mastic	TSI - Thermal System	SD - Significant Damage	CF - Cubic Feet	NDA - No Asbestos Detected
T - Tank Insulation	AT - Acoustical Tile	Insulation			Assumed ACM - No Samples Taken
EJ - Expansion Joint	SA - Spray Acoustic	R - Roof			
BI - Boiler Insulation	W- Wall	DW - Drywall			
	P - Plaster	JC - Joint Compound			

Relinquished By: [signature]	Relinquished By:	Relinquished By:
Date/Time : 1052 1/22/21	Date/Time :	Date/Time :
Received By:	Received By:	Received By:

Appendix D

Inspector Certifications and Licenses

STATE OF NEVADA
DEPARTMENT OF BUSINESS AND INDUSTRY
DIVISION OF INDUSTRIAL RELATIONS
Occupational Safety and Health Administration
Asbestos Control Program

Certifies That Robert Piekarz
State of Nevada-DOT
is Licensed As Asbestos Abatement Consultant

License No. IJ-1049 Expiration Date 11/24/2021

Signature Of Licensee

STATE OF NEVADA
DEPARTMENT OF BUSINESS AND INDUSTRY
DIVISION OF INDUSTRIAL RELATIONS
Occupational Safety and Health Administration
Asbestos Control Program

Certifies That Robert Piekarz
State of Nevada-DOT
is Licensed As Asbestos Abatement Consultant

License No. IJ-1049 Expiration Date 11/24/2021

Signature Of Licensee

M & C Environmental Training

Asbestos Inspector

Refresher Training Course

Robert Piekarz

Has successfully completed the Asbestos Inspector Refresher course approved by the California Division of Occupational Safety and Health for purposes of certification required by Title 8, Article 2.7, Chapter 3.2, Section 341.16 and the accreditation required under the Toxic Substances Control Act, Title II. Conducted by M&C Environmental Training Inc., P.O. Box 6419, Concord, California Tel. # (510 499-5646

Course Approval Number: CA-003-06

Location:	**Concord, California**	**Expiration: November 24, 2021**
Dates:	**November 24, 2020**	
Director of Training: John McGinnis		

Certificate Number **48309 IR**

M & C Environmental Training

Asbestos Management Planner

Refresher Training Course

Robert Piekarz

Has successfully completed the Asbestos Management Planner Refresher course approved by the California Division of Occupational Safety and Health for purposes of certification required by Title 8, Article 2.7, Chapter 3.2, Section 341.16 and the accreditation required under the Toxic Substances Control Act, Title II. Conducted by M&C Environmental Training Inc., P.O. Box 6419, Concord, California. Tel. # (510) 499 - 5646

Course Approval Number: CA-003-08

Location:	**Concord, California**	**Expiration: November 24, 2021**
Dates:	**November 24, 2020**	
Director of Training: John McGinnis		

Certificate Number **48327 PR**