TRC
21 Griffin Rd. North
Windsor, CT 06095
T 860.298.9692
TRCcompanies.com

March 24, 2025

Mr. Jason Coite, P.E.
Principal Engineer
Division of Environmental Compliance
Bureau of Engineering and Construction
State of Connecticut Department of Transportation
2800 Berlin Turnpike, P.O. Box 317546
Newington, CT 06131-7546

Attention: Michael Bedson, P.E. / Felix Mathieu

Subject: On-Call Asbestos, Lead, Air Quality & Demolition Compliance
Agreement No.: 10.04-02 (23)
HazMat Inspection – Removal of I-84 EB Exit 21 Off-Ramp, Waterbury, CT
ConnDOT Assignment No. 524-8307
ConnDOT Project No. 151-340
TRC Project No. 501871.8307.0710

Dear Mr. Coite:

TRC performed a limited survey for hazardous building materials associated with the removal of the I-84 EB Exit 21 off-ramp in Waterbury, Connecticut. The scope of the inspection included Bridge 03191F, Bridge No. 03196 (lighting improvements only) and traffic signals and pedestrian control equipment at all the Traffic Signal Intersections detailed in the provided PP0151-014 Traffic Signal List. Results of the survey identified the following:

- Results of the survey identified no detectable levels of lead on the painted structural steel/metal bridge components on the underside of Bridge No. 03191F; therefore, any paint waste generated would considered be non-hazardous, non-RCRA waste. However, lead paint was identified on the metal railing bridge components on Bridge No. 03191F. The projected paint waste debris from the painted metal railing bridge components are presently presumed as CTDEEP/RCRA hazardous lead waste.

- Lead paint is **presently presumed** on various metal traffic components (i.e. traffic signals, crosswalk hoods, crosswalk push buttons, span poles, controller cabinets, etc.) at all the listed Traffic Signal Intersections.

- Any paint waste generated from the lead painted metal traffic components at the Intersection Sites should be tested for TCLP lead to determine proper waste disposal (hazardous vs. non-hazardous).

- All span poles at the Intersection Sites were found to be galvanized (unpainted) with the exception of one span pole at Intersection No. 151-212.

- Suspect white caulking (C2) around the base of metal railing posts on Bridge 03191F was sampled and found to contain asbestos. All other suspect caulkings and bridge/sidewalk expansion joint materials/fillers at Bridge 03191F and the Intersection Sites were sampled and found to contain no detectable amounts of asbestos.

- Potential universal waste (UW) and Connecticut Regulated Waste (CRW) items (i.e. Hg lamps/PCB ballasts and/or printed circuit boards) associated with the lighting on I-84 EB Exit 21 off-ramp/Bridge 03191F, lighting under Bridge No. 03196 and traffic lights, crosswalk signal hoods/buttons and controller cabinets at the Intersections are present at the Sites.

- Bird/pigeon guano accumulations were identified/presumed on abutments, piers, and structural steel components at Bridge Nos. 03191F and 03196.

- No homeless activity/bloodborne pathogen (BBP) concerns (i.e. needles, sharps, biohaz waste, etc.) were identified at any of the locations.

Laboratory results, TRC Mobile Data Solutions report & project information are attached.

If you have any questions, please call TRC at (860) 298-9692.

Very Truly Yours,

TRC

Reviewed By:

Stephen R. Arienti, CHMM
N.E. Regional Practice Leader – Engineer in Charge

Erik R. Plimpton, P.E., CHMM, CMC
Vice President – Engineer in Charge

Lead Based Paint Measurement Summary Table

Device(s) : Niton XLP301-A (Serial #22323) X Ray Fluorescence (XRF) Spectrum Analyzer
Client : ConnDOT
Site : I-84 EB Exit 21 Off-Ramp, Waterbury, CT
Project # : 501871.8307.00710
Date(s) : 12/6/2024
Inspector : Alex Lemay

Number	Floor	Side	Structure	Feature	Material	Color	Condition	Reading (mg/cm^2)	Precision (mg/cm^2)	Depth Index	Duration (sec)	Date/Time
1	Shutter Calibration							3.8	0.0		102.21	12/6/2024 13:50
2	0.0 Calibration							0.0	0.0	1	4.25	12/6/2024 13:52
3	3.5 Calibration							3.7	0.6	1.33	3.42	12/6/2024 13:53
4	1.6 Calibration							1.6	0.2	1.18	3.42	12/6/2024 13:53
5	Bridge 03191F	--	Structural Support	Beam	Metal	White	INTACT	0.0	0.0	1	5.71	12/6/2024 14:04
6	Bridge 03191F	--	Structural Support	Beam	Metal	White	INTACT	0.0	0.0	1	3.42	12/6/2024 14:05
7	Bridge 03191F	C	Structural Support	Beam	Metal	White	INTACT	0.0	0.0	1.29	4.57	12/6/2024 14:05
8	Bridge 03191F	B	Structural Support	Beam	Metal	White	INTACT	0.0	0.0	1	2.85	12/6/2024 14:06
9	Bridge 03191F	D	Structural Support	Beam	Metal	White	INTACT	0.0	0.0	2.37	4.56	12/6/2024 14:06
10	Bridge 03191F	D	Structural Support	Beam	Metal	White	INTACT	0.0	0.0	1	3.71	12/6/2024 14:07
11	Bridge 03191F	B	Structural Support	Beam	Metal	White	INTACT	0.0	0.0	1	3.72	12/6/2024 14:09
12	Bridge 03191F	C	Structural Support	Beam	Metal	White	INTACT	0.0	0.0	1	4.54	12/6/2024 14:09
13	Bridge 03191F	--	Topside Railing	Post	Metal	Grey	INTACT	**0.2**	**0.2**	4.02	3.72	12/6/2024 14:12
14	Bridge 03191F	--	Topside Railing	Post	Metal	Grey	INTACT	**0.3**	**0.2**	4.61	5.14	12/6/2024 14:12
15	Bridge 03191F	--	Topside Railing	Rail	Metal	Grey	INTACT	**0.2**	**0.1**	4	6.54	12/6/2024 14:13
16	Bridge 03191F	--	Topside Railing	Rail	Metal	Grey	INTACT	**0.4**	**0.3**	8.52	4.28	12/6/2024 14:13
17	VOID											12/6/2024 14:14
18	0.0 Calibration							0.0	0.0	1	3.41	12/6/2024 14:34
19	3.5 Calibration							3.5	0.3	1.32	4.53	12/6/2024 14:34
20	1.6 Calibration							1.7	0.1	1.2	8.5	12/6/2024 14:35

Lead paint includes paint found to contain **any detectable** amount of lead
by Atomic Absorption Spectrophotometry (AAS) or X-Ray Fluorescence (XRF).

Side A = Street side; Sides B,C,D follow clockwise

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

BULK ASBESTOS ANALYSIS REPORT

CLIENT: CT Department of Transportation

Lab Log #: 0065990
Project #: 501871.8307.0710
Date Received: 12/13/2024
Date Analyzed: 12/17/2024

Site: Exit 21, I-84 Exit Ramp, Bridges & Intersections, Waterbury, CT

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Sample Location	Homogeneous Material Description	Other Matrix Materials		Asbestos %	Asbestos Type
01	Market Square and South Main St Northeast corner around pedestrian walk but	Black JF1 - joint filler between sidewalk segments	90%	cellulose	ND	None
02	Meadow St and Grand St northeast corner	Black JF1 - joint filler between sidewalk segments	90%	cellulose	ND	None
03	West Liberty and South Main St	Black JF1 - joint filler between sidewalk segments	90%	cellulose	ND	None
04	South Main St and East Clay	Black JF1 - joint filler between sidewalk segments	90%	cellulose	ND	None
05	Market Square and South Main St southeast corner	Black EJ1 - expansion Joint tar around curb of storm drain	60%	cellulose	ND	None
06	Market Square and South Main St Southeast corner	Black EJ1 - expansion Joint tar around curb of storm drain	60%	cellulose	ND	None
07	Meadow St and Grand St Southwest Corner	Black JF2 - styrofoam with tar-like coating on top		- - -	ND	None
08	Meadow St and Grand St Northwest Corner	Black JF2 - styrofoam with tar-like coating on top		- - -	ND	None
09	West liberty at south main southwest corner	Black EJ2 - expansion joint tar between sidewalk segments	20%	cellulose	ND	None
10	West liberty at south main southwest corner	Black EJ2 - expansion joint tar between sidewalk segments	20%	cellulose	ND	None
11	Bank st at west liberty southeast corner	Black/Brown JF3 - joint filler at base of controller box	90%	cellulose	ND	None
12	Bank st at west liberty southeast corner	Black/Brown JF3 - joint filler at base of controller box	90%	cellulose	ND	None
13	Meadow st at bank st controller box by Exxon	Grey C1 - caulk where metal component of controller box meets concrete base.		- - -	ND	None
14	Meadow st at bank st controller box at Exxon	Grey C1 - caulk where metal component of controller box meets concrete base.		- - -	ND	None
15	Bridge 03191F between railing and concrete abutment wall	White C2 - caulking between railing base and concrete abutment wall		- - -	3%	Chrysotile
16	Bridge 03191F between railing and concrete abutment wall	- -		- -	NA/PS	- -

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POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Sample Location	Homogeneous Material Description	Other Matrix Materials	Asbestos %	Asbestos Type
17	Between expansion joints on top of bridge 03191F	Black EJ3 - expansion joint tar	- - -	ND	None
18	Between expansion joints on top of bridge 03191F	Black EJ3 - expansion joint tar	- - -	ND	None
19	Between granite curb and concrete abutment wall on bridge 03191F	Black EJ4 - expansion joint	- - -	ND	None
20	Between granite curb and concrete abutment wall on bridge 03191F	Black EJ4 - expansion joint	- - -	ND	None

ND - asbestos was not detected
Trace - asbestos was observed at level of 1% or less - This is the reporting limit
NA/PS - Not Analyzed / Positive Stop
SNA - Sample Not Analyzed- See Chain of Custody for details
Notes: Asbestos-Containing Material (ACM) is any material containing more than 1% asbestos

Note: Polarized-light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. In those cases, EPA recommends, and certain states (e.g. NY) require, that negative results be confirmed by quantitative transmission electron microscopy.

The Laboratory at TRC follows 18/01A EPA -- 40 CFR Appendix E to subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples and 18/A03 EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials which utilize polarized light microscopy (PLM). Our analysts have completed an accredited course in asbestos identification. TRC's Laboratory is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP), for Bulk Asbestos Fiber Analysis, NVLAP Code 101424-01. TRC is accredited by the AIHA Laboratory Accreditation Programs AIHA LAP (ID: LAP-100122) in the Industrial Hygiene Program (IHLAP) for PLM. Asbestos content is determined by visual estimate unless otherwise indicated. Quality Control is performed in-house on at least 10% of samples and QC data related to the samples is available upon written request from client.

Analyzed by: Kathleen Williamson, Laboratory Manager

Reviewed by Najaat Bhura, Approved Signatory

Date Issued
12/17/2024

TRC

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

Edition: October 2009
Supersede Previous Edition

LAB ID #. 65990

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
501871.8307.0710	ConnDOT — Exit 21 I-84 exit ramp bridges and intersections, I-84 Exit 21, Waterbury, CT		PLM: ☐ 8hr ☐ 24hr ☐ 48hr X 3day TEM: ☐ 24hr ☐ 48hr ☐ 3day X 5day
SIGNATURE	INSPECTOR		
	Andrew Smith, Cole Bova		

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
01	12/6/2024	11:02		X	Market Square and South Main St Northeast corner around pedestrian walk button	X				X	JF1 - Black joint filler between sidewalk segments
02	12/6/2024	11:36		X	Meadow St and Grand St northeast corner	X					JF1 - Black joint filler between sidewalk segments
03	12/13/2024	10:24		X	West Liberty and South Main St	X					JF1 - Black joint filler between sidewalk segments
04	12/13/2024	10:25		X	South Main St and East Clay	X					JF1 - Black joint filler between sidewalk segments
05	12/6/2024	11:11		X	Market Square and South Main St southeast corner	X				X	EJ1 - Expansion Joint tar around curb of storm drain
06	12/6/2024	11:11		X	Market Square and South Main St Southeast corner	X					EJ1 - Expansion Joint tar around curb of storm drain
07	12/6/2024	11:26		X	Meadow St and Grand St Southwest Corner	X		X		X	JF2 - Styrofoam with tar like coating on top
08	12/6/2024	11:27		X	Meadow St and Grand St Northwest Corner	X		X			JF2 - Styrofoam with tar like coating on top

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	12/13/24	12/13/24			
(Printed) Cole Bova	Time: 11:00	(Printed) 1130	(Printed)	Time:	(Printed)

Remarks:

Condition of Samples:
Acceptable: Yes ✓ No ____
Comments:

TRC
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ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

Edition: October 2009
Supersede Previous Edition

LAB ID #. 65990

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
501871.8307.0710	ConnDOT — Exit 21 I-84 exit ramp bridges and intersections, I-84 Exit 21, Waterbury, CT		PLM: [ ] 8hr [ ] 24hr [ ] 48hr [X] 3day TEM: [ ] 24hr [ ] 48hr [ ] 3day [X] 5day

SIGNATURE	INSPECTOR
	Andrew Smith, Cole Bova

FIELD SAMPLE NUMBER	DATE	TIME	TYPE: COMP	TYPE: GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
09	12/6/2024	11:57		X	West liberty at south main southwest corner	X				X	EJ2 - Black expansion joint tar between sidewalk segments
10	12/6/2024	11:58		X	West liberty at south main southwest corner	X					EJ2 - Black expansion joint tar between sidewalk segments
11	12/6/2024	12:28		X	Bank st at west liberty southeast corner	X					JF3 - Black and brown joint filler at base of controller box
12	12/6/2024	12:29		X	Bank st at west liberty southeast corner	X					JF3 - Black and brown joint filler at base of controller box
13	12/6/2024	12:41		X	Meadow st at bank st controller box by Exxon	X				X	C1 - Grey caulk where metal component of controller box meets concrete base.
14	12/6/2024	12:41		X	Meadow st at bank st controller box at Exxon	X					C1 - Grey caulk where metal component of controller box meets concrete base.
15	12/6/2024	13:23		X	Bridge 03191F between railing and concrete abutment wall	X				X	C2 - Caulking between railing base and concrete abutment wall
16	12/6/2024	13:24		X	Bridge 03191F between railing and concrete abutment wall	X					C2 - Caulking between railing base and concrete abutment wall

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	12/13/24	12/13/24			
(Printed) Cole Bova	Time: 11:00	(Printed) Dave Marino 1130	(Printed)	Time:	(Printed)

Remarks:

Condition of Samples: ✓
Acceptable: Yes ✓ No ____
Comments:

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ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

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PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
501871.8307.0710	ConnDOT — Exit 21 I-84 exit ramp bridges and intersections, I-84 Exit 21, Waterbury, CT		PLM: 8hr 24hr 48hr X 3day TEM: 24hr 48hr 3day X 5day
SIGNATURE	INSPECTOR		
	Andrew Smith, Cole Bova		

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
17	12/6/2024	13:26		X	Between expansion joints on top of bridge 03191F	X				X	EJ3 - Black expansion joint tar
18	12/6/2024	13:27		X	Between expansion joints on top of bridge 03191F	X					EJ3 - Black expansion joint tar
19	12/6/2024	13:28		X	Between granite curb and concrete abutment wall on bridge 03191F	X				X	EJ4 - Expansion joint
20	12/6/2024	13:29		X	Between granite curb and concrete abutment wall on bridge 03191F	X					EJ4 - Expansion joint

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	12/13/24	12/13/24			
(Printed) Cole Bova	Time: 11:00	(Printed) Dave Marino 1130	(Printed)	Time:	(Printed)
Remarks:		Condition of Samples: Acceptable: Yes ✓ No ____ Comments:			Page 3 of 3

Aerobiology Laboratory Associates, Inc.

22 Cummings Park, Woburn, MA 01801 Ph. 781-935-3212 Fax 781-932-4857

TEM Bulk Chain of Custody Record

Date: 12/17/2024

PO#: **C501871** Analysis Type: Chatfield **EPA N.O.B** Qualitative

Client: TRC

Client Job#: 501871.8307.0710

Client Job Ref./Loc.: CT DOT- Exit 21, I-84 Exit Ramp, Bridges & Intersections, Waterbury, CT

Relinquished by: K. Williamson

Received by:

Report to: KWilliamson@trccompanies.com; SArienti@trccompanies.com; EPlimpton@trccompanies.com; KGraff@trccompanies.com; DCarillo@trccompanies.com; MKostruba@trccompanies.com

Samplers Name: A. Smith & C. Bova

Turnaround Time: <12 Hour <24 Hour <48 Hour <3 Day **5 Day** Other:

				For Lab Use Only	
Client ID #	**Lab ID#**	**Description**	**Location**	**Acceptable on Receipt**	**Comments**
01	65990	Joint Filler	See COC		
05	65990	Joint Tar			
07	65990	Tar-Like Coating			
09	65990	Expansion Joint Tar			
11	65990	Joint Filler			
13	65990	Caulk			
17	65990	Expansion Joint Tar			
19	65990	Expansion Joint			

For Lab Use Only	# Spies	Total	Client #	Batch #	Results Reported	Comments

Steve Arienti
TRC Companies, Inc. (CT)
21 Griffin Road North
Windsor, CT 06095

January 02, 2025

Dear Steve Arienti,

Results of samples you described and submitted to Pace Analytical Services, LLC. are shown on the enclosed data sheets. The analytical results in this report apply to the items tested only.
The listed samples were prepared and analyzed in compliance with the New York State Transmission Electron Microscope Method for Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples. This method is used for the determination of weight percent of asbestos in non-friable materials.
The sample is processed to remove non-asbestos interference. The remaining residue is examined using a Philips transmission electron microscope equipped with selected area electron diffraction (SAED) and an Evex energy dispersive x-ray analyzer.

The following are reported: identification numbers, type of material, initial weight of the sample, weight percent of organic material lost by ashing, weight percent of carbonates lost by acid dissolution, weight percent of non-fibrous/non asbestos inorganic material, total weight percent of asbestos in the original sample, and the type(s) of asbestos, if any.
The EPA recognizes asbestos as the following: actinolite, amosite, anthophyllite, chrysotile, crocidolite, and tremolite. To be considered asbestos containing, a material must be determined to contain greater than one percent asbestos. Samples are retained for a period of 2 months.

The quality control data related to the samples analyzed are available for review upon the written request of the client. Pace Analytical Services, LLC. and its personnel assume no responsibility for potential sample contamination, misuse, misinformation, or misrepresentation by the client. The enclosed results may not be used under any circumstances as product endorsement by any US government agency including NIST/NVLAP.
This report may not be reproduced, except in its entirety, without permission of the Pace Analytical Services, LLC.'s Laboratory Manager.

Please contact me if you have any questions regarding this report or related information.

Aimee L Cormier

Aimee Cormier, Laboratory Manager

Enclosure:

BATCH NUMBER : NT 21269 CLIENT PROJECT ID: 501871.8307.0710
Client Ref: CT DOT - Exit 21, I-84 Exit Ramp, Bridges & Intersections, Waterbury, CT
CT ID# PH-0209; MA ID# AA000251; ME ID# LB-055; ME ID# LA-056; VT ID# AL254362; RI ID# TEM 00150.

Pace Analytical Services, LLC. - Woburn

22 Cummings Park, Woburn, Massachusetts 01801
781-935-3212 ~ E-Mail bostonaero@pacelabs.com

Laboratory Report

Client Project #: 501871.8307.0710
Client Reference: CT DOT - Exit 21, I-84 Exit Ramp, Bridges & Intersections, Waterbury, CT
PO #: C501871
Client #: 297
Client Name: TRC Companies, Inc. (CT)

Batch: **NT 21269**
Method: NOB
Date Received: 12/18/2024
Date Analyzed: 12/24/2024
Date of Report: 1/2/2025

LAB ID	Field ID	Description:	Color	Initial Weight	% Asbestos Types						% Other Non-asb.	% Organic	% Carb.	Total % Asbestos	Analyzed / Charged	Prepped / Charged
					CHR	AMO	ACT	CRO	ANT	TRE						
NT153512	01	Black Joint Filler		.1139	.00	.00	.00	.00	.00	.00	16.68	77.88	5.44	**ND**	Yes	No
NT153513	05	Expansion Joint Tar		.2404	.00	.00	.00	.00	.00	.00	58.03	37.52	4.45	**ND**	Yes	No
NT153514	07	Styrofoam with Tar-like Coating on Top		.1626	.00	.00	.00	.00	.00	.00	60.39	22.14	17.47	**ND**	Yes	No
NT153515	09	Black Expansion Joint Tar		.2433	.00	.00	.00	.00	.00	.00	67.20	28.36	4.44	**ND**	Yes	No
NT153516	11	Black and Brown Joint Filler		.1418	.00	.00	.00	.00	.00	.00	6.35	91.68	1.97	**ND**	Yes	No
NT153517	13	Grey Caulk		.2137	.00	.00	.00	.00	.00	.00	58.77	25.46	15.77	**ND**	Yes	No
NT153518	17	Black Expansion Joint Tar		.4520	.00	.00	.00	.00	.00	.00	8.80	64.16	27.04	**ND**	Yes	No
NT153519	19	Expansion Joint		.2189	.00	.00	.00	.00	.00	.00	3.20	82.91	13.89	**ND**	Yes	No

Comments:

Key: CHR = Chrysotile AMO = Amosite CRO = Crocidolite ACT = Actinolite TRE = Tremolite ANT = Anthophyllite TR = Trace = < 1% ND = None Detected

Aimee L Cormier

Aimee Cormier, Analyst

NT 21269

Aerobiology Laboratory Associates, Inc.

22 Cummings Park, Woburn, MA 01801 Ph. 781-935-3212 Fax 781-932-4857

TEM Bulk Chain of Custody Record

Date: 12/17/2024

PO#: **C501871** Analysis Type: Chatfield **EPA N.O.B** Qualitative

Client: TRC

Client Job#: 501871.8307.0710

Client Job Ref./Loc.: CT DOT- Exit 21, I-84 Exit Ramp, Bridges & Intersections, Waterbury, CT

Relinquished by: K. Williamson

Received by: 12/18/24 10:55

Report to: KWilliamson@trccompanies.com; SArienti@trccompanies.com; EPlimpton@trccompanies.com; KGraff@trccompanies.com; DCarillo@trccompanies.com; MKostruba@trccompanies.com

Samplers Name: A. Smith & C. Bova

Turnaround Time: <12 Hour <24 Hour <48 Hour <3 Day **5 Day** Other:

				For Lab Use Only	
Client ID #	**Lab ID#**	**Description**	**Location**	**Acceptable on Receipt**	**Comments**
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13	65990	Caulk			
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19	65990	Expansion Joint			

For Lab Use Only	# Spies	Total	Client #	Batch #	Results Reported	Comments

NT21269

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21 GRIFFIN ROAD NORTH
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ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

Edition: October 2009
Supersede Previous Edition

LAB ID #. 65990

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SIGNATURE	INSPECTOR		
	Andrew Smith, Cole Bova		

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01	12/6/2024	11:02		X	Market Square and South Main St Northeast corner around pedestrian walk button	X				X	JF1 - Black joint filler between sidewalk segments
02	12/6/2024	11:36		X	Meadow St and Grand St northeast corner	X					JF1 - Black joint filler between sidewalk segments
03	12/13/2024	10:24		X	West Liberty and South Main St	X					JF1 - Black joint filler between sidewalk segments
04	12/13/2024	10:25		X	South Main St and East Clay	X					JF1 - Black joint filler between sidewalk segments
05	12/6/2024	11:11		X	Market Square and South Main St southeast corner	X				X	EJ1 - Expansion Joint tar around curb of storm drain
06	12/6/2024	11:11		X	Market Square and South Main St Southeast corner	X					EJ1 - Expansion Joint tar around curb of storm drain
07	12/6/2024	11:26		X	Meadow St and Grand St Southwest Corner	X		X		X	JF2 - Styrofoam with tar like coating on top
08	12/6/2024	11:27		X	Meadow St and Grand St Northwest Corner	X		X			JF2 - Styrofoam with tar like coating on top

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	12/13/24	12/13/24			
(Printed) Cole Bova	Time: 11:00	(Printed) 1130	(Printed)	Time:	(Printed)

Remarks:

Condition of Samples:
Acceptable: Yes ✓ No
Comments:

NT21269

Edition: October 2009
Supersede Previous Edition

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

LAB ID #. 65990

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
501871.8307.0710	ConnDOT — Exit 21 I-84 exit ramp bridges and intersections, I-84 Exit 21, Waterbury, CT		PLM: 8hr 24hr 48hr X 3day TEM: 24hr 48hr 3day X 5day
SIGNATURE	INSPECTOR		
	Andrew Smith, Cole Bova		

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
09	12/6/2024	11:57		X	West liberty at south main southwest corner	X				X	EJ2 - Black expansion joint tar between sidewalk segments
10	12/6/2024	11:58		X	West liberty at south main southwest corner	X					EJ2 - Black expansion joint tar between sidewalk segments
11	12/6/2024	12:28		X	Bank st at west liberty southeast corner	X				X	JF3 - Black and brown joint filler at base of controller box
12	12/6/2024	12:29		X	Bank st at west liberty southeast corner	X					JF3 - Black and brown joint filler at base of controller box
13	12/6/2024	12:41		X	Meadow st at bank st controller box by Exxon	X				X	C1 - Grey caulk where metal component of controller box meets concrete base.
14	12/6/2024	12:41		X	Meadow st at bank st controller box at Exxon	X					C1 - Grey caulk where metal component of controller box meets concrete base.
15	12/6/2024	13:23		X	Bridge 03191F between railing and concrete abutment wall	X				X	C2 - Caulking between railing base and concrete abutment wall
16	12/6/2024	13:24		X	Bridge 03191F between railing and concrete abutment wall	X					C2 - Caulking between railing base and concrete abutment wall

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	12/13/24	12/13/24			
(Printed) Cole Bova	Time: 11:00	(Printed) Dave Marino 1130	(Printed)	Time:	(Printed)

Remarks:

Condition of Samples:
Acceptable: Yes ✓ No
Comments:

NT21269

Edition: October 2009
Supersede Previous Edition

TRC
21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

LAB ID #. 65990

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
501871.8307.0710	ConnDOT — Exit 21 I-84 exit ramp bridges and intersections, I-84 Exit 21, Waterbury, CT		PLM: 8hr 24hr 48hr X 3day TEM: 24hr 48hr 3day X 5day
SIGNATURE	INSPECTOR		
	Andrew Smith, Cole Bova		

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
17	12/6/2024	13:26		X	Between expansion joints on top of bridge 03191F	X				X	EJ3 - Black expansion joint tar
18	12/6/2024	13:27		X	Between expansion joints on top of bridge 03191F	X					EJ3 - Black expansion joint tar
19	12/6/2024	13:28		X	Between granite curb and concrete abutment wall on bridge 03191F	X				X	EJ4 - Expansion joint
20	12/6/2024	13:29		X	Between granite curb and concrete abutment wall on bridge 03191F	X					EJ4 - Expansion joint

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	12/13/24	12/13/24			
(Printed) Cole Bova	Time: 11:00	(Printed) 1130	(Printed)	Time:	(Printed)
Remarks:		Condition of Samples: Acceptable: Yes ✓ No ____ Comments:			Page 3 of 3

80 Lupes Drive
Stratford, CT 06615

COMPLETE ENVIRONMENTAL TESTING, INC.

Tel: (203) 377-9984
Fax: (203) 377-9952
e-mail: cet1@cetlabs.com

Client: Mr. Cole Bova
TRC Environmental Consultants
21 Griffin Rd., North
Windsor, CT 06095

Analytical Report

CET# 24L0403

Report Date:December 20, 2024
Project: I-84 Exit 21 Ramp Bridges & Assoc. Intersections
Project Number: 501871.8307.0710

Connecticut Laboratory Certificate: PH 0116
Massachusetts Laboratory Certificate: M-CT903
Rhode Island Laboratory Certificate: 199

NELAP ACCREDITED TNI LABORATORY

New York NELAP Accreditation: 11982
Pennsylvania Laboratory Certificate: 68-02927

SAMPLE SUMMARY

The sample(s) were received at 24.4°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
01	24L0403-01	Paint Chip	12/06/2024 13:00	12/16/2024
02	24L0403-02	Paint Chip	12/06/2024 13:30	12/16/2024

Analyte: Total Lead [EPA 6010D] **Analyst: SS**

Prep: EPA 3051A **Matrix: Paint Chip**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
24L0403-01	01	ND	0.10	%	1	BL41829	12/18/2024	12/19/2024 13:03	
24L0403-02	02	ND	0.10	%	1	BL41829	12/18/2024	12/19/2024 13:07	

CET # : 24L0403

Project: I-84 Exit 21 Ramp Bridges & Assoc. Intersections

Project Number: 501871.8307.0710

QUALITY CONTROL SECTION

Batch BL41829 - EPA 6010D

Analyte	Result (%)	RL (%)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Blank (BL41829-BLK1)					Prepared: 12/18/2024 Analyzed: 12/19/2024				
Lead	ND	0.10							

CET # : 24L0403
Project: I-84 Exit 21 Ramp Bridges & Assoc. Intersections
Project Number: 501871.8307.0710

80 Lupes Drive
Stratford, CT 06615

COMPLETE ENVIRONMENTAL TESTING, INC.

Tel: (203) 377-9984
Fax: (203) 377-9952
email: cet1@cetlabs.com

Quality Control Definitions and Abbreviations

Internal Standard (IS)	An Analyte added to each sample or sample extract. An internal standard is used to monitor retention time, calculate relative response, and quantify analytes of interest.
Surrogate Recovery	The % recovery for non-target organic compounds that are spiked into all samples. Used to determine method performance.
Continuing Calibration	An analytical standard analyzed with each set of samples to verify initial calibration of the system.
Batch	Samples that are analyzed together with the same method, sequence and lot of reagents within the same time period.
ND	Not detected at or above the specified reporting limit.
RL	RL is the limit of detection for an analyte after any adjustment made for dilution or percent moisture.
Dilution	Multiplier added to detection levels (MDL) and/or sample results due to interferences and/or high concentration of target compounds.
Duplicate	Result from the duplicate analysis of a sample.
Result	Amount of analyte found in a sample.
Spike Level	Amount of analyte added to a sample
Matrix Spike Result	Amount of analyte found including amount that was spiked.
Matrix Spike Dup	Amount of analyte found in duplicate spikes including amount that was spike.
Matrix Spike % Recovery	% Recovery of spiked amount in sample.
Matrix Spike Dup % Recovery	% Recovery of spiked duplicate amount in sample.
RPD	Relative percent difference between Matrix Spike and Matrix Spike Duplicate.
Blank	Method Blank that has been taken through all steps of the analysis.
LCS % Recovery	Laboratory Control Sample percent recovery. The amount of analyte recovered from a fortified sample.
Recovery Limits	A range within which specified measurements results must fall to be compliant.
CC	Calibration Verification

Flags:

- H- Recovery is above the control limits
- L- Recovery is below the control limits
- B- Compound detected in the Blank
- P- RPD of dual column results exceeds 40%
- #- Sample result too high for accurate spike recovery.

NELAP ACCREDITED TNI LABORATORY

Connecticut Laboratory Certification PH0116
Massachussets Laboratory Certification M-CT903
Pennsylvania NELAP Accreditation 68-02927

New York NELAP Accreditation 11982
Rhode Island Certification 199

All questions related to this report should be directed to David Ditta, Timothy Fusco, or Jeffrey Smith at 203-377-9984.

Sincerely,

David Ditta
Laboratory Director

This technical report was reviewed by Timothy Fusco

Project Manager

Report Comments:

Sample Result Flags:
E- The result is estimated, above the calibration range.
H- The surrogate recovery is above the control limits.
L- The surrogate recovery is below the control limits.
B- The compound was detected in the laboratory blank.
P- The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.
D- The RPD between the sample and the sample duplicate is high. Sample Homogeneity may be a problem.
+- The Surrogate was diluted out.
*C1- The Continuing Calibration did not meet method specifications and was biased low for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased low.
*C2- The Continuing Calibration did not meet method specifications and was biased high for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased high.
*F1- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the low side.
*F2- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the high side.
*I- Analyte exceeds method limits from second source standard in Initial Calibration Verification (ICV). No directional bias.

All results met standard operating procedures unless indicated by a data qualifier next to a sample result, or a narration in the QC report.

For Percent Solids, if any of the following prep methods (3050B, 3540C, 3545A, 3550C, 5035 and 9013A) were used for samples pertaining to this report, the percent solids procedure is within that prep method.

Complete Environmental Testing is only responsible for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt.

ND is None Detected at or above the specified reporting limit
Reporting Limit (RL) is the limit of detection for an analyte after any adjustment made for dilution or percent moisture.
All analyses were performed in house unless a Reference Laboratory is listed.
Samples will be disposed of 30 days after the report date.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 6010D in Solid	
Lead	CT,NY,PA

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2026
NY	New York Certification (NELAC)	11982	04/01/2025
PA	Pennsylvania DEP	68-02927	05/31/2025

24L0403

TRC

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

Edition: November 2013
Supersede Previous Edition

TCLP CHAIN OF CUSTODY

LAB ID #.

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
501871.8307.0710	Exit 21 I-84 exit ramp bridges and associated intersections		TCLP Pb: 24hr 48hr X 3day 5day Total Pb: 24hr 48hr X 3day 5day

INSPECTOR: (SIGNATURE) Cole Bowen (PRINTED) Cole Bowen

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	RCRA Pb	RCRA Pb, AS, CR, CD	8 RCRA Metals	TCLP Pb	SPLP Pb	Total Pb	MATERIAL
01	12/6/24	13:00		X	Bridge 03191F				X			Grey top railings
02	12/6/24	13:30		X	Bridge 03191F				X		X	Light Green structural beams

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
Cole Bowen	12/13/24	1255 12-16-24		12-16-24	
(Printed) Cole Bowen	Time: 10:30	(Printed)	(Printed)	Time: 16:40	(Printed)

For Sample 02 please test total Pb first

TDMP N 2424

SIH - WinSIH HBM Survey

ConnDOT, Exit 21 I-84 exit ramp bridges and intersections, I-84 Exit 21 Waterbury CT

12/16/2024, 10:48:00 PM UTC

CREATED

12/5/2024, 3:34:47 PM UTC
by Andrew Smith

UPDATED

12/16/2024, 10:48:00 PM UTC
by Kathleen Williamson

STATUS

In Progress

ASSIGNED TO

No Assignment

NOTE: No site sketch detected!
Please be sure to add at least one.

JOB INFORMATION

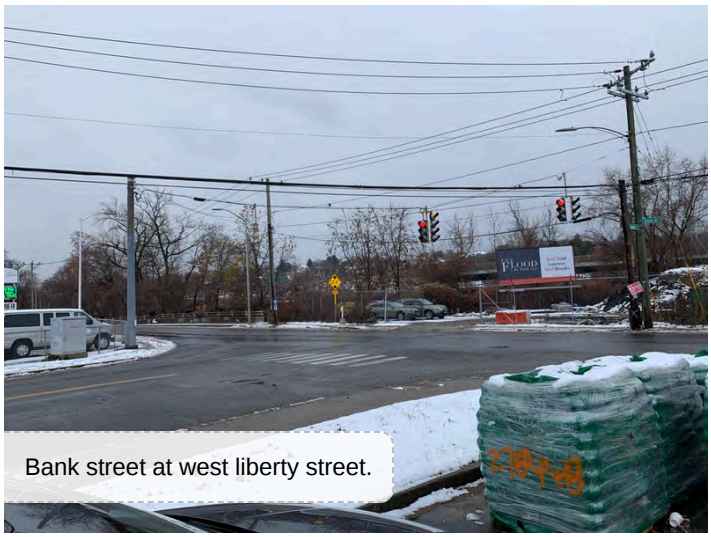
Site Name	Exit 21 I-84 exit ramp bridges and intersections
Address	I-84 Exit 21 Waterbury CT
TRC Project Number	501871.8307.0710
Project Manager	Stephen Arienti, Michael Kostruba, Erik Plimpton
Inspector(s)	Andrew Smith, Cole Bova
Client	ConnDOT
Type of Asbestos Survey	
Site Sketch Diagrams	
Additional Analysis for NOB Materials (Calc)	TEM NY NOB 198.4
PLM Turnaround Time (TAT)	3-day
TEM Turnaround Time (TAT)	
Date	
General Notes	

Overview Photo

Bank street/Meadow Street

Market square and south Main Street intersection

South Main Street at East Clay street



Bank street at west liberty street.

Options & Other Settings

Use auto-numbering?	No
Auto-fill gaps?	Yes
Alert user about missing site sketch?	Yes

SURVEYS PERFORMED	Asbestos, Bridge/Signs/Light Pole/Traffic Signal Items, TCLP Sampling, XRF, Hazardous Materials Inventory

Asbestos Survey

Materials & Samples (9 Items)

Materials & Samples - 1. (4) Samples #01–04: JF1–Black joint filler between sidewalk segments

Sample Information

Asbestos Samples (4 Items)

Asbestos Samples - 1. Sample #01: JF1…Market Square and South Main St Northeast corner around pedestrian walk button

Sample Number	01
Sample Location	Market Square and South Main St Northeast corner around pedestrian walk button
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	December 6, 2024
Time	11:02
Sample Location Photo	

Asbestos Samples - 2. Sample #02: JF1…Meadow St and Grand St northeast corner

Sample Number	02
Sample Location	Meadow St and Grand St northeast corner
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	December 6, 2024
Time	11:36
Sample Location Photo	

Asbestos Samples - 3. Sample #03: JF1…West Liberty and South Main St

Sample Number	03
Sample Location	West Liberty and South Main St
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	December 13, 2024
Time	10:24
Sample Location Photo	

Asbestos Samples - 4. Sample #04: JF1…South Main St and East Clay

Sample Number	04
Sample Location	South Main St and East Clay
Asbestos Bulk Analysis	PLM EPA 600/R93/116

Grab or Composite	Grab
Date	December 13, 2024
Time	10:25
Sample Location Photo	

Material Information

Sampled or Assumed?	Sampled
Material Acronym	JF1
Material Description	Black joint filler between sidewalk segments
Material Color	Black

Representative Photos

Analyze by layer?	No
Is material non-friable organically bound (NOB)?	Yes
Homogeneous Area	
Total Approximate Quantity	140 linear ft

Notes	Also at the southeast corner in between sidewalk segments Meadow st and grand st northeast corner around base of controller box and between building and sidewalk and in between various sidewalk segments and at base of span pole Meadow and grand southeast corner between sidewalk segments West liberty and south main southeast corner around curb of storm drain South main st at east clay northeast corner between sidewalk segments around utility pole

Materials & Samples - 2. (2) Samples #05–06: EJ1–Expansion Joint tar around curb of storm drain

Sample Information

Asbestos Samples (2 Items)

Asbestos Samples - 1. Sample #05: EJ1…Market Square and South Main St southeast corner

Sample Number	05
Sample Location	Market Square and South Main St southeast corner
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	December 6, 2024
Time	11:11
Sample Location Photo	

Asbestos Samples - 2. Sample #06: EJ1…Market Square and South Main St Southeast corner

Sample Number	06
Sample Location	Market Square and South Main St Southeast corner
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	December 6, 2024
Time	11:11
Sample Location Photo	

Material Information

Sampled or Assumed?	Sampled

Material Acronym	EJ1
Material Description	Expansion Joint tar around curb of storm drain
Material Color	Black

Representative Photos

Analyze by layer?	No
Is material non-friable organically bound (NOB)?	Yes
Homogeneous Area	
Total Approximate Quantity	6 linear ft
Notes	

Materials & Samples - 3. (2) Samples #07–08: JF2–Styrofoam with tar like coating on top

Sample Information

Asbestos Samples (2 Items)

Asbestos Samples - 1. Sample #07: JF2…Meadow St and Grand St Southwest Corner

Sample Number	07
Sample Location	Meadow St and Grand St Southwest Corner
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	December 6, 2024
Time	11:26
Sample Location Photo	

Asbestos Samples - 2. Sample #08: JF2…Meadow St and Grand St Northwest Corner

Sample Number	08
Sample Location	Meadow St and Grand St Northwest Corner
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	December 6, 2024
Time	11:27
Sample Location Photo	

Material Information

Sampled or Assumed?	Sampled
Material Acronym	JF2
Material Description	Styrofoam with tar like coating on top
Material Color	Black

Representative Photos

Analyze by layer?	Yes
Is material non-friable organically bound (NOB)?	Yes
Homogeneous Area	
Total Approximate Quantity	75 linear ft
Notes	Around span pole base and along back curb at southwest corner Around back curb, traffic box in ground and between sidewalk and asphalt at northwest corner North east corner between sidewalk segments

Materials & Samples - 4. (2) Samples #09–10: EJ2–Black expansion joint tar between sidewalk segments

Sample Information

Asbestos Samples (2 Items)

Asbestos Samples - 1. Sample #09: EJ2…West liberty at south main southwest corner

Sample Number	09
Sample Location	West liberty at south main southwest corner
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	December 6, 2024
Time	11:57
Sample Location Photo	

Asbestos Samples - 2. Sample #10: EJ2…West liberty at south main southwest corner

Sample Number	10
Sample Location	West liberty at south main southwest corner
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	December 6, 2024
Time	11:58
Sample Location Photo	

Material Information

Sampled or Assumed?	Sampled
Material Acronym	EJ2
Material Description	Black expansion joint tar between sidewalk segments
Material Color	Black

Representative Photos

Analyze by layer?	No
Is material non-friable organically bound (NOB)?	Yes
Homogeneous Area	
Total Approximate Quantity	10 linear ft
Notes	

Materials & Samples - 5. (2) Samples #11–12: JF3–Black and brown joint filler at base of controller box

Sample Information

Asbestos Samples (2 Items)

Asbestos Samples - 1. Sample #11: JF3…Bank st at west liberty southeast corner

Sample Number	11
Sample Location	Bank st at west liberty southeast corner

Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	December 6, 2024
Time	12:28
Sample Location Photo	

Asbestos Samples - 2. Sample #12: JF3…Bank st at west liberty southeast corner

Sample Number	12
Sample Location	Bank st at west liberty southeast corner
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	December 6, 2024
Time	12:29
Sample Location Photo	

Material Information

Sampled or Assumed?	Sampled
Material Acronym	JF3
Material Description	Black and brown joint filler at base of controller box
Material Color	Black

Representative Photos

Analyze by layer?	No
Is material non-friable organically bound (NOB)?	No
Homogeneous Area	
Total Approximate Quantity	20 linear ft
Notes	

Materials & Samples - 6. (2) Samples #13–14: C1–Grey caulk where metal component of controller box meets concrete base.

Sample Information

Asbestos Samples (2 Items)

Asbestos Samples - 1. Sample #13: C1…Meadow st at bank st controller box by Exxon

Sample Number	13
Sample Location	Meadow st at bank st controller box by Exxon

Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	December 6, 2024
Time	12:41
Sample Location Photo	

Asbestos Samples - 2. Sample #14: C1…Meadow st at bank st controller box at Exxon

Sample Number	14
Sample Location	Meadow st at bank st controller box at Exxon
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	December 6, 2024
Time	12:41
Sample Location Photo	

Material Information

Sampled or Assumed?	Sampled
Material Acronym	C ▸ 1
Material Description	Grey caulk where metal component of controller box meets concrete base.
Material Color	Grey

Representative Photos

Analyze by layer?	No
Is material non-friable organically bound (NOB)?	Yes
Homogeneous Area	
Total Approximate Quantity	20 linear ft
Notes	

Materials & Samples - 7. (2) Samples #15–16: C2–Caulking between railing base and concrete abutment wall

Sample Information

Asbestos Samples (2 Items)

Asbestos Samples - 1. Sample #15: C2…Bridge 03191F between railing and concrete abutment wall

Sample Number	15

Sample Location	Bridge 03191F between railing and concrete abutment wall
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	December 6, 2024
Time	13:23
Sample Location Photo	

Asbestos Samples - 2. Sample #16: C2…Bridge 03191F between railing and concrete abutment wall

Sample Number	16
Sample Location	Bridge 03191F between railing and concrete abutment wall
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	December 6, 2024
Time	13:24
Sample Location Photo	

Material Information

Sampled or Assumed?	Sampled
Material Acronym	C ▸ 2
Material Description	Caulking between railing base and concrete abutment wall
Material Color	White

Representative Photos

Analyze by layer?	No
Is material non-friable organically bound (NOB)?	Yes
Homogeneous Area	
Total Approximate Quantity	
Notes	

Materials & Samples - 8. (2) Samples #17–18: EJ3–Black expansion joint tar

Sample Information

Asbestos Samples (2 Items)

Asbestos Samples - 1. Sample #17: EJ3…Between expansion joints on top of bridge 03191F

Sample Number	17
Sample Location	Between expansion joints on top of bridge 03191F

Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	December 6, 2024
Time	13:26
Sample Location Photo	

Asbestos Samples - 2. Sample #18: EJ3…Between expansion joints on top of bridge 03191F

Sample Number	18
Sample Location	Between expansion joints on top of bridge 03191F
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	December 6, 2024
Time	13:27
Sample Location Photo	

Material Information

Sampled or Assumed?	Sampled
Material Acronym	EJ3
Material Description	Black expansion joint tar
Material Color	Black

Representative Photos

Analyze by layer?	No
Is material non-friable organically bound (NOB)?	Yes
Homogeneous Area	
Total Approximate Quantity	300 linear ft
Notes	

Materials & Samples - 9. (2) Samples #19–20: EJ4–Expansion joint

Sample Information

Asbestos Samples (2 Items)

Asbestos Samples - 1. Sample #19: EJ4…Between granite curb and concrete abutment wall on bridge 03191F

Sample Number	19
Sample Location	Between granite curb and concrete abutment wall on bridge 03191F

Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	December 6, 2024
Time	13:28
Sample Location Photo	

Asbestos Samples - 2. Sample #20: EJ4…Between granite curb and concrete abutment wall on bridge 03191F

Sample Number	20
Sample Location	Between granite curb and concrete abutment wall on bridge 03191F
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	December 6, 2024
Time	13:29
Sample Location Photo	

Material Information

Sampled or Assumed?	Sampled
Material Acronym	EJ4
Material Description	Expansion joint
Material Color	Black

Representative Photos

Analyze by layer?	No
Is material non-friable organically bound (NOB)?	Yes
Homogeneous Area	
Total Approximate Quantity	
Notes	Entire length of bridge on both sides

XRF Survey

Niton XRF Model No.	22323
XRF Survey Completed	Yes
XRF Data Downloaded	Yes
XRF Shots >1.0 on non-metallic building materials	No
Date Data Downloaded	December 13, 2024

HAZMAT Inventory

Inventory Areas (1 Item)

Inventory Areas - 1. Bridge No. 03196

Inventory Area Description	Bridge No. 03196

HAZMAT Items (1 Item)

HAZMAT Items - 1. Universal Waste (UW) ▸ Compact Fluorescent (Hg Lamps)

Description	Universal Waste (UW) ▸ Compact Fluorescent (Hg Lamps)
Common Name	
Quantity	2
Size	
Photo	
**** PLEASE CONSIDER THESE GUIDELINES WHEN ADDING A HAZ ITEM ** 1) When selecting the "HAZMAT Item Description", be sure to check ALL pre-defined options before selecting "Other" and entering a custom option. 2) You only need to enter a "HAZMAT Item Common Name" if the "HAZMAT Item Description" isn't specific enough to sufficiently describe the hazardous material.**	

TCLP/SPLP/Total Lead Survey

Samples (1 Item)

Samples - 1. Bridge 03191F

TCLP/SPLP/Total Lead Sample Description	Bridge 03191F

TCLP/SPLP/Total Lead Components (1 Item)

TCLP/SPLP/Total Lead Components - 1. Painted Concrete (Detectable Pb)

Material	Painted Concrete (Detectable Pb)
Square Footage	
Type of Analysis	TCLP Lead
Sample Number	
Grab or Composite	
Date	December 6, 2024
Time	13:38
TCLP/SPLP/Total Lead Notes	

TCLP/SPLP/Total Lead Photos

Bridge/Signs/Light Pole/Traffic Signal Item Inventory

Items (7 Items)

Items - 1. Meadow St at Bank st traffic signal.

Bridge/Sign/Light Pole/Traffic Signal No.	Meadow St at Bank st traffic signal.
General Notes	5 pedestrian signals, assume Pb paint 2 span poles 8 traffic signal lights, assume Pb paint
Accessibility	Accessible
Paint on Structure (s)?	Yes
Paint on what Components/Structure(s)?	All pedestrian signals and traffic lights are painted.
Suspect Asbestos Containing Materials Identified on Structure	No
Guano Present?	No
Homeless Activity	No
Bloodborne Pathogen Concerns?	No
Mice/Mouse Nests/Droppings	No

Items - 2. Exit 22 terminus at Market Square and South Main St(Signal No. 151-256)

Bridge/Sign/Light Pole/Traffic Signal No.	Exit 22 terminus at Market Square and South Main St(Signal No. 151-256)
General Notes	2 span poles(span poles have pedestrian signals on each) 3 pedestrian signals 7 traffic signals.
Accessibility	Accessible
Paint on Structure (s)?	Yes
Paint on what Components/Structure(s)?	Traffic signals Pedestrian signals
Suspect Asbestos Containing Materials Identified on Structure	No
Guano Present?	No
Homeless Activity	No
Bloodborne Pathogen Concerns?	No
Mice/Mouse Nests/Droppings	No

Items - 3. Meadow St. at Grand St. Signal No. 151-236

Bridge/Sign/Light Pole/Traffic Signal No.	Meadow St. at Grand St. Signal No. 151-236
General Notes	2 pedestrian signals 2 span poles(each has pedestrian signals) 8 traffic signals
Accessibility	Accessible
Paint on Structure (s)?	Yes
Paint on what Components/Structure(s)?	Pedestrian signals Traffic signals Span posts
Suspect Asbestos Containing Materials Identified on Structure	No
Guano Present?	No
Homeless Activity	No
Bloodborne Pathogen Concerns?	No
Mice/Mouse Nests/Droppings	No

Items - 4. West liberty at south Main Street Signal No. 151-229

Bridge/Sign/Light Pole/Traffic Signal No.	West liberty at south Main Street Signal No. 151-229
General Notes	8 traffic signals 1 span pole 2 pedestrian signals
Accessibility	Accessible
Paint on Structure (s)?	Yes
Paint on what Components/Structure(s)?	Traffic signals Pedestrian signals
Suspect Asbestos Containing Materials Identified on Structure	No
Guano Present?	No
Homeless Activity	No
Bloodborne Pathogen Concerns?	No
Mice/Mouse Nests/Droppings	No

Items - 5. Meadow St. at West Liberty St.(Actually Bank st. At West Liberty St

Bridge/Sign/Light Pole/Traffic Signal No.	Meadow St. at West Liberty St.(Actually Bank st. At West Liberty St
General Notes	1 pedestrian pedestal 1 span pole 5 traffic signals
Accessibility	Accessible
Paint on Structure (s)?	Yes
Paint on what Components/Structure(s)?	All traffic signals Pedestrian pedestal
Suspect Asbestos Containing Materials Identified on Structure	No
Guano Present?	No
Homeless Activity	No
Bloodborne Pathogen Concerns?	No
Mice/Mouse Nests/Droppings	No

Items - 6. West main st. At east clay(actually south main st. at east clay)

Bridge/Sign/Light Pole/Traffic Signal No.	West main st. At east clay(actually south main st. at east clay)
General Notes	2 span poles(1 painted) 6 traffic signals 4 pedestrian pedestals
Accessibility	Accessible
Paint on Structure (s)?	Yes
Paint on what Components/Structure(s)?	All traffic signals All pedestrian pedestals 1 span pole.
Suspect Asbestos Containing Materials Identified on Structure	No
Guano Present?	No
Homeless Activity	No
Bloodborne Pathogen Concerns?	No
Mice/Mouse Nests/Droppings	No

Items - 7. Bridge No. 03196

Bridge/Sign/Light Pole/Traffic Signal No.	Bridge No. 03196

General Notes	2 bulbs
Accessibility	Accessible
Paint on Structure (s)?	Yes
Paint on what Components/Structure(s)?	
Suspect Asbestos Containing Materials Identified on Structure	No
Guano Present?	Yes
Guano Locations	
Guano Square Footage	
Guano Photos	
Homeless Activity	No
Bloodborne Pathogen Concerns?	No
Mice/Mouse Nests/Droppings	No

LAB & SAMPLE SUBMISSION INFO

Signature	

Asbestos Bulk Samples

Remarks to be added to the CoC	
Asbestos samples submitted to TRC lab?	Yes
Date Submitted to Lab	December 16, 2024
Asbestos bulk sample CoC data electronically sent to lab yet?	Yes
Asbestos bulk sample results reviewed?	No

TCLP Samples

TCLP/SPLP Samples Submitted to Lab	No
TCLP/SPLP Samples Submitted To:	
Date Submitted to Lab	

REPORT CREATION

Select one or more documents below to be generated. Once completed in the cloud, they will be sent to the listed email address.	
NOTE: Asbestos bulk sample CoC data must now be sent electronically to the lab by selecting "Asbestos chain-of-custody - Send to Lab" from the list below.	
What documents should be generated?	Asbestos chain-of-custody - Send to Lab
Generate Documents	

PROJECT STATUS TRACKING

Has this survey been completed?	No
Has the report been written?	No
Has the report been reviewed?	No

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

memorandum

subject: **Task 100 Environmental Screening**
Project No.: 0151-0340

Removal of I-84 EB Exit 21 Off-Ramp
City of Waterbury

date: 9/20/2023

to: Nilesh M. Patel
Transportation Principal Engineer
Bureau of Engineering and Construction

attn: Jonathan M. Dean, Project Manager

attn: Joseph O. Belrose, Project Engineer

from: Jason M. Coite
Transportation Principal Engineer
Bureau of Engineering and Construction

In response to your memo dated 9/18/2023, this project was reviewed and the determination is that further investigations are warranted.

A Task 710 Investigative Survey will be conducted to identify contaminated or hazardous materials (e.g. lead, asbestos, guano, hazmat items, etc) within the project limits.

Plans, specifications and cost estimate will be provided, if required, pending the results of these surveys.

Soil from excavation activities should be re-used on site. If, after every effort has been made to reuse excavated soils, it is found infeasible, please contact our Office for further soil investigations.

All lead-based paint on traffic equipment will be covered by *ITEM#1118012A Removal and/or Relocation of Traffic Signal Equipment.*

Attached is a copy of the Task 100, Environmental Screening Review form by which the project was evaluated.

If you have any questions, please contact Mandy K. Socolosky at extension 3396.

Attachment

Mandy K. Socolosky

cc: Nilesh M. Patel – Jonathan M. Dean – Joseph O. Belrose
Jason M. Coite – Michael F. Bedson – Mandy K. Socolosky

TASK 100 ENVIRONMENTAL SCREENING REVIEW

Project Number: 0151-0340 ASSIGNMENT #:: 718-7735 Date: 9/18/2023

Project Description: Removal of I-84 EB Exit 21 Off-Ramp, City of Waterbury

RIGHT-OF-WAY ACTIVITIES

Project Area Type: Urban

Full Take:	☐
Partial Take, Substantial:	☐
Partial Take, Minor:	☐
Easements:	☑

Comments: Construction easements (driveways, slope, sidewalks)

SUPPORTING CATEGORIES

Drainage Improvements Relocations:	☑
Utility Involvement Relocations:	☑
De-watering Operations During Construction:	☐
Environmental Permits Required:	☐
River Work:	☐
Railroad Property Involvement:	☐
Excavations in Excess of 3 Feet Deep:	☐
Excess Materials Generated for Offsite Disposal:	☐
Potential Lead Based Paint Impact:	☑
Potential Asbestos Material Impact :	☑

Comments:

Recommendation Task 710

Reviewer:: Mandy K. Socolosky

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

memorandum

subject: **Hazardous/Contaminated Materials Screening Request**

Project No.: 0151-0340
F.A.P. No.: 0842(320) [PE]
Removal of I-84 EB Exit 21 Off-Ramp
City of Waterbury

date: September 18, 2023

to: Jason M. Cote
Transportation Principal Engineer
Bureau of Engineering and Construction

from: Nilesh M. Patel
for Transportation Principal Engineer
Bureau of Engineering and Construction

Digitally signed by Jonathan Dean
Date: 2023.09.18 09:36:57-04'00'

Please provide a hazardous/contaminated materials screening for this project and inform this office of any environmental concerns by **October 11, 2023**.

Project Schedule:

FDP: October 9, 2024
DCD: November 20, 2024
ADV: December 18, 2024

Federal Program: STBG Program – Anywhere (STPA) – 80 Federal/20 State

PE Funding: 0151-0331 PE; Please note the 0151-0331 project number is the parent project, which is the New Mix Planning & Environmental Linkages (PEL) Study for the eventual Replacement of the I-84/CT Route 8 Interchange, also known as the Mixmaster.

Please use the documents in the ongoing Preliminary Design Review session on COMPASS located here: 0151-0340 (sharepoint.com); The review session will be open until October 20, 2023.

Right-of-Way (ROW) will be required for this project. Most ROW impacts will be minimal for construction of sidewalk and driveways. Areas to be aware of include: 409 South Main Street (impacts to slope for bus stop improvements and widening for right turn lane onto McMahon Street) and 600-634 Bank Street/425 Bank Street (traffic easements).

This project involves the following excavation activities:

- Full depth roadway excavation is anticipated for new curbing and widening to accommodate the aforementioned new right turn lane from South Main Street onto McMahon Street, as shown on the plans.
- Excavation for new drainage structures as required. Potentially necessary where the curb line is shifted although this may only be for structure tops; location of proposed bus bump-out on South Main Street; along Meadow Street as the existing roadway width is being reduced. New plantings and the potential for an infiltration rain garden are being considered along Meadow Street as well.
- Excavation will be required where the off-ramp structure (Bridge No. 03191F) will be removed.
- Uncertain now if dewatering activities will be required. A geotechnical investigation will most likely be required.

This project involves the removal of Bridge No. 03191F. Lighting improvements are proposed for the South Main Street underpass of I-84 (Bridge No. 03196).

Attached for your information and use are the following:

- 03191F
- 03196

There are no known utilities along or below Bridge No. 03191F. Overhead wires traverse below Bridge No. 03196. There is small diameter rigid metal conduit, potentially for traffic control, below the structure and larger diameter rigid metal conduit along the north side of the structure.

This project involves sign/traffic control signals/light standard/intersection improvements.

A list of traffic signal equipment to be replaced under this project can be found at the following link: PP0151-014 Traffic Signal List

Please also refer to the Traffic subset within the Preliminary Design Review on COMPASS (link provided on first page of this memorandum)

Please contact Joseph O. Belrose, Project Engineer, at Joe.Belrose@ct.gov or (860) 594-3067, should you have any questions or require additional information.

Please address your response to the attention of: Jonathan M. Dean, Project Manager – Joseph O. Belrose, Project Engineer.

Joseph O. Belrose III/job
cc: Nilesh M. Patel – Jonathan M. Dean