



21 Griffin Rd. North  
Windsor, CT 06095

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December 30, 2019

Mr. Adam G. Fox, 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: Amie Maines, P.E. / Michael Bedson, PE

Subject: On-Call Asbestos, Lead, Air Quality & Demolition Compliance  
Agreement No. 8.07-01 (18)  
HazMat Inspection – Bridge No. 02812 (Bridge/Culvert/ACCOMPA), West  
Stafford Road & Orcuttville Road, Stafford Springs, CT  
ConnDOT Assignment No. 519-6167  
ConnDOT Project No. 134-147  
TRC Project No. 289951.6167.0710

Dear Mr. Fox:

TRC performed a limited hazardous materials site investigation associated with the planned rehabilitation of Bridge No. 02812 (Bridge/Culvert/ACCOMPA) in Stafford Springs, Connecticut. Lead paint was identified on the metal bridge railing surfaces on the West Stafford Road section of the site. The black tar material in the bridge wall beneath the road on the West Stafford Road section of the site was sampled and found to contain no detectable amounts of asbestos. However, the black tar material and membrane inside the corrugated metal culvert pipes on the Orcuttville Road section of the site were both sampled and found to be asbestos containing materials. No other suspect materials were identified. XRF data, laboratory results, site sketch, TRC Mobile Data Solutions report and site description/site map are attached.

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

Very Truly Yours,

TRC

Stephen R. Arienti, CHMM  
Senior Project Manager – Program Manager

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



## Lead Based Paint Measurement Summary Table

**Device(s):** Niton XLP301-A (Serial #24792) X Ray Fluorescence (XRF) Spectrum Analyzer  
**Site:** I-691 Bridges & Overhead Signs, Southington & Meriden, CT  
**Project # :** 289951.6107.0710  
**Date(s):** 12/20/2019  
**Inspectors:** Nick Selvo & Tyler Noll

Number	Interior/ Exterior	Location	Structure	Feature	Material	Color	Condition	Reading (mg/cm <sup>2</sup> )	Precision (mg/cm <sup>2</sup> )	Depth Index	Duration (sec)	Date/Time
1		Shutter Calibration						0.0	0.0	1.0	132.8	12/20/2019 11:19
2		0.0 Calibration						1.6	0.1	1.2	1.5	12/20/2019 11:26
3		1.6 Calibration						3.7	0.3	1.3	6.3	12/20/2019 11:27
4		3.5 Calibration						0.0	0.0	1.0	6.9	12/20/2019 11:27
5		EXTERIOR	Railing		Metal	Grey	Defective	0.0	0.0	1.0	3.3	12/20/2019 11:30
6		EXTERIOR	Railing		Metal	Grey	Defective	4.1	0.4	1.5	4.1	12/20/2019 11:30
7		EXTERIOR	Railing		Metal	Grey	Defective	9.4	1.9	1.9	4.4	12/20/2019 11:32
8		EXTERIOR	Railing		Metal	Grey	Defective	7.4	1.8	2.0	4.3	12/20/2019 11:32
9		0.0 Calibration						0.0	0.0	1.0	2.0	12/20/2019 12:08
10		1.6 Calibration						1.5	0.1	1.1	5.4	12/20/2019 12:08
11		3.5 Calibration						3.7	0.2	1.3	12.8	12/20/2019 12:09

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





21 GRIFFIN ROAD NORTH  
WINDSOR, CONNECTICUT 06095  
TELEPHONE (860) 298-9692  
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## ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

Edition: October 2009  
Supersede Previous Edition

LAB ID #. 54620

PROJECT NUMBER		PROJECT NAME		PARAMETERS				TURNAROUND TIME														
								PLM:	8hr	X	24hr	48hr	3day									
PROJECT NUMBER		PROJECT NAME		PARAMETERS				TURNAROUND TIME														
								TEM:	24hr	48hr	3day	5day										
289951.6167.0710		ConnDOT - Stafford Culvert, 107 W Stafford Rd, Stafford Springs, CT		PLM EPA 600/R93/116 (POSITIVE STOP)	X	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)		ANALYZE BY LAYER		POINT COUNT (IF >1% & <10%)		TEM NY NOB 1984 (IF PLM SERIES NEG)										
SIGNATURE		INSPECTOR		MATERIAL																		
SIGNATURE <i>SM</i>		INSPECTOR Brendan McClure, Tyler Noll																				
FIELD SAMPLE NUMBER	DATE	TIME	TYPE		SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP) <th rowspan="2">PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP) <th rowspan="2">ANALYZE BY LAYER</th> <th rowspan="2">POINT COUNT (IF &gt;1% &amp; &lt;10%)</th> <th rowspan="2">TEM NY NOB 1984 (IF PLM SERIES NEG)</th> <th colspan="5"></th> </th>	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP) <th rowspan="2">ANALYZE BY LAYER</th> <th rowspan="2">POINT COUNT (IF &gt;1% &amp; &lt;10%)</th> <th rowspan="2">TEM NY NOB 1984 (IF PLM SERIES NEG)</th> <th colspan="5"></th>	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 1984 (IF PLM SERIES NEG)												
			COMP	GRAB							PLM EPA 600/R93/116 (POSITIVE STOP) <th>PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP) <th>ANALYZE BY LAYER</th> <th>POINT COUNT (IF &gt;1% &amp; &lt;10%)</th> <th>TEM NY NOB 1984 (IF PLM SERIES NEG)</th> <th>8hr</th> <th>X</th> <th>24hr</th> <th>48hr</th> <th>3day</th> </th>	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP) <th>ANALYZE BY LAYER</th> <th>POINT COUNT (IF &gt;1% &amp; &lt;10%)</th> <th>TEM NY NOB 1984 (IF PLM SERIES NEG)</th> <th>8hr</th> <th>X</th> <th>24hr</th> <th>48hr</th> <th>3day</th>	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 1984 (IF PLM SERIES NEG)	8hr	X	24hr	48hr	3day		
1	12/20/2019	10:50	X		2nd culvert under Orcuttville Rd between W Stafford Rd	X				X												
2	12/20/2019	10:50	X		Woods side of Orcuttville Rd 1st culvert	X																
3	12/20/2019	10:51	X		1st culvert under Orcuttville Rd between W Stafford Rd	X																
4	12/20/2019	10:38	X		In wall underneath painted railing on West Stafford St	X				X												
5	12/20/2019	10:40	X		In wall underneath painted railing on West Stafford St	X																

Relinquished by: (Signature) <i>SM</i>	Date: 12/20/19	Received by: (Signature) <i>[Signature]</i>	Date: 12/20/19	Relinquished by: (Signature)	Date:	Received by: (Signature)
(Printed) TYLER NOLL	Time: 1230	(Printed) 1300	Time: 1300	(Printed)	Time:	(Printed)
Remarks:				Condition of Samples: Acceptable: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
				Page 1 of 1		



**BULK ASBESTOS ANALYSIS REPORT**

CLIENT: CT Department of Transportation

Lab Log #: 0054620  
 Project #: 289951.6167.0710  
 Date Received: 12/20/2019  
 Date Analyzed: 12/23/2019

Site: Stafford Culvert, 107 W. Stafford Road, Stafford Springs, CT

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

Sample No.	Color	Homogenous	Multi-Layered	Layer No.	Other Matrix Materials	Asbestos %	Asbestos Type
1	Black (tar)	Yes	No	--	---	ND	None
2	Black (tar)	No	Yes	1	---	ND	None
2	Black (fibrous material)	No	Yes	2	---	30%	Chrysotile
3	Black (tar)	No	Yes	1	---	ND	None
3	Black (fibrous material)	No	Yes	2	---	30%	Chrysotile
4	Black (tar)	Yes	No	--	---	ND	None
5	Black (tar)	Yes	No	--	---	ND	None

Reporting limit- asbestos present at 1%  
 ND - asbestos was not detected  
 Trace - asbestos was observed at level of less than 1%  
 NA/PS - Not Analyzed / Positive Stop  
 SNA- Sample Not Analyzed- See Chain of Custody for details

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 the EPA's Interim Method for the Determination of Asbestos in Bulk Insulation 1982 (EPA 600/M4-82-020) Bulk Analysis Code 18/A01 and the EPA recommended Method for the Determination of Asbestos in Bulk Building Materials July 1993, R.L. Perkins and B.W. Harvey, (EPA/600/R-93/116) Bulk Analysis Code 18/A03, 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 18/A01, effective through June 30, 2020. TRC is accredited by the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC in the Industrial Hygiene Program (IHLAP) for PLM effective through October 1, 2020. 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.

This report shall not be reproduced, except in full, without the written approval of TRC. This report must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report relates only to the items tested.

Analyzed by: K. Williamson Reviewed by: Cathryn Lemire Date Issued: 12/23/2019  
 Kathleen Williamson, Laboratory Manager Cathryn Lemire, Approved Signatory

TRC LABORATORY ASBESTOS ANALYTICAL ACCREDITATIONS

NVLAP Lab Code 101424-0 AIHA-LAP, LLC #100122 CT #PH-0426 ME LA-0075, LB-0071 MA #AA000052 NY #10980 WV #000622  
 RI #PLM0007 TX #300354 VT #AL910359 LA#05011 VA #3333 000283 AZ #A20944 HI #L-09-004 NJ #CT004 CA #2907  
 CO# AL-15020 PHIL# 461 PA#68-03387





# ProScience Analytical Services, Inc.

22 Cummings Park, Woburn, Massachusetts 01801  
 781-935-3212 ~ Fax: 781-932-4857 ~ E-Mail: general@proscience.net

## Laboratory Report

Client Project #: 289951.6167.0710  
 Client Reference: CT DOT - Stafford Culvert, 107 W. Stafford Rd, Stafford Springs, CT  
 PO #: C289951  
 Client #: 297  
 Client Name: TRC Companies, Inc. (CT)

Batch: NT 18112  
 Method: NOB  
 Date Received: 12/24/2019  
 Date Analyzed: 12/26/2019  
 Date of Report: 12/26/2019

LAB ID	Field ID	Description:	Color	Initial Weight	% Asbestos Types				% Other Non-asb.	% Organic	% Carb.	Total % Asbestos	Analyzed / Charged	Preped / Charged
					CHR	AMO	ACT	CRO						
NT136142	1	Black Tar Coating		.1524	2.82	.00	.00	.00	.00	82.35	3.54	2.82	Yes	No
NT136143	4	Black Tar in Bridge Wall underneath Road		.2407	.00	.00	.00	.00	.00	60.82	9.31	ND	Yes	No

**Comments:**

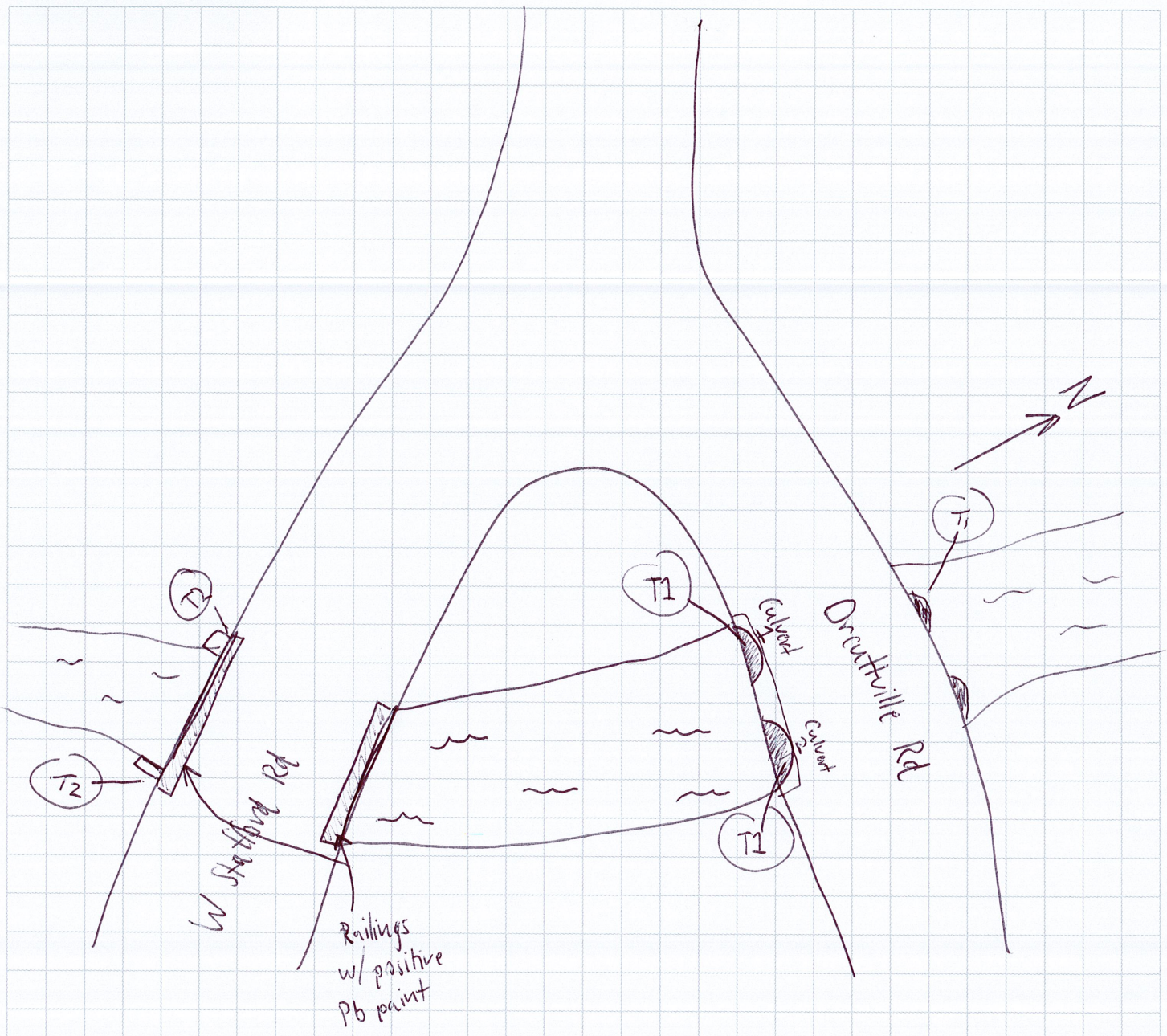
Key: CHR = Chrysotile AMO = Amosite CRO = Crocidolite ACT = Actinolite TRE = Tremolite ANT = Anthophyllite TR = Trace = < 1% ND = None Detected

*Ahnee Cormier*  
 Ahnee Cormier, Analyst

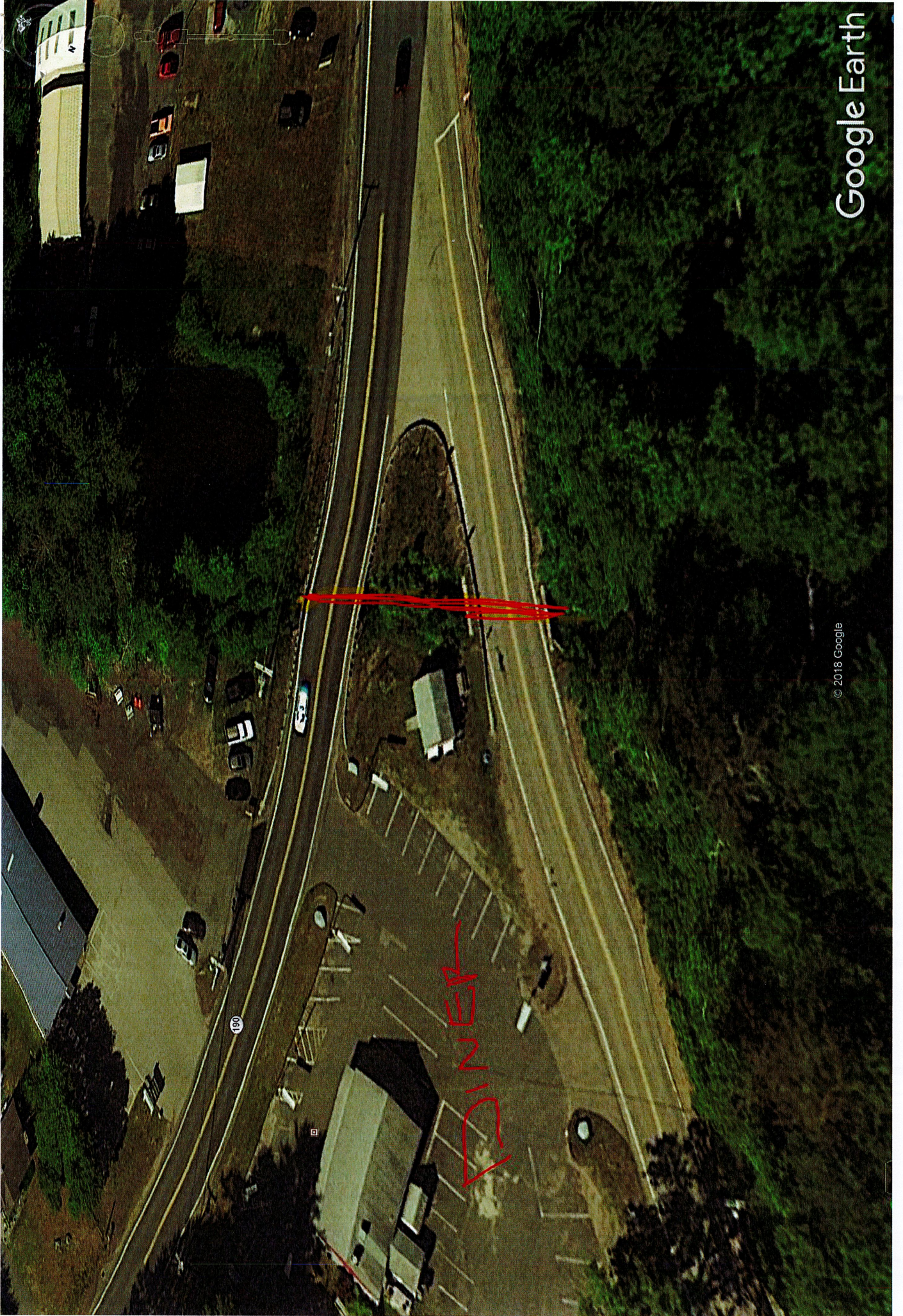




SUBJECT Stafford Culvert









## ConnDOT, Stafford Culvert, Tolland, , Stafford Springs, 06076, CT, US, W Stafford Rd, 107

Created	2019-12-20 15:09:45 UTC by Brendan McClure
Updated	2019-12-27 15:11:15 UTC by Erik Plimpton
Location	41.9717967929709, -72.3356889188963
Status	<span style="color: blue;">■</span> Survey Complete

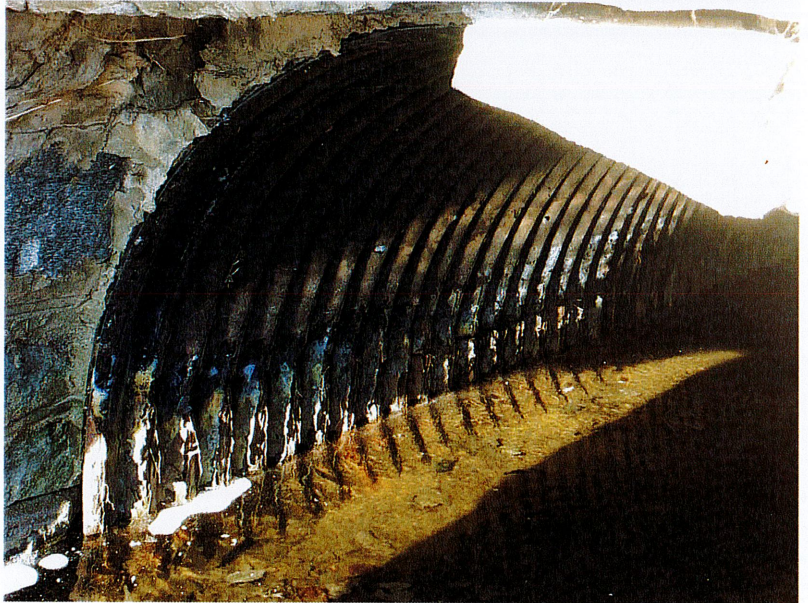
### Job Information

Site Name	Stafford Culvert
Address	107 W Stafford Rd Stafford Springs, CT 06076
TRC Project Number	289951.6167.0710
Project Manager	Erik Plimpton
Inspector(s)	Brendan McClure, Tyler Noll
Client	ConnDOT
Type of Asbestos Survey	Reno/Demo
Additional Analysis for NOB Materials (Calc)	TEM NY NOB 198.4
PLM Turnaround Time (TAT)	24-hour
Date	2019-12-20
General Notes	No suspect materials under bridge 02812

Overview Photo















Surveys Performed

Asbestos, XRF

### Asbestos Section

( 3 ), T1, Black tar coating , 3

Representative Photos



### 2nd culvert under Orcuttville Rd between W Stafford Rd

Sample Location

2nd culvert under Orcuttville Rd between W Stafford Rd

Analyze by Layer

No



Asbestos Bulk Analysis

PLM EPA 600/R93/116

Grab or Composite

Grab

Date

2019-12-20

Time

10:50

Sample Location Photo





### Woods side of Orcuttville Rd 1st culvert

Sample Location	Woods side of Orcuttville Rd 1st culvert
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-12-20
Time	10:50



Sample Location Photo



**1st culvert under Orcuttville Rd between W Stafford Rd**

Sample Location	1st culvert under Orcuttville Rd between W Stafford Rd
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-12-20
Time	10:51
Sample Location Photo	



**Material Information**

Sampled or Assumed?

Sampled



Material Acronym	T1
Material Description	Black tar coating
Is Material a Non-Friable Organically Bound (NOB)	Yes
Total Approximate Quantity	300 sqft
Total Count	( 3 )
Total Count (number only)	3

**( 2 ), T 2, Black tar in bridge wall underneath road , 2**

Representative Photos



**In wall underneath painted railing on West Stafford St**

Sample Location	In wall underneath painted railing on West Stafford St
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-12-20
Time	10:38

**In wall underneath painted railing on West Stafford St**

Sample Location	In wall underneath painted railing on West Stafford St
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-12-20
Time	10:40



## Material Information

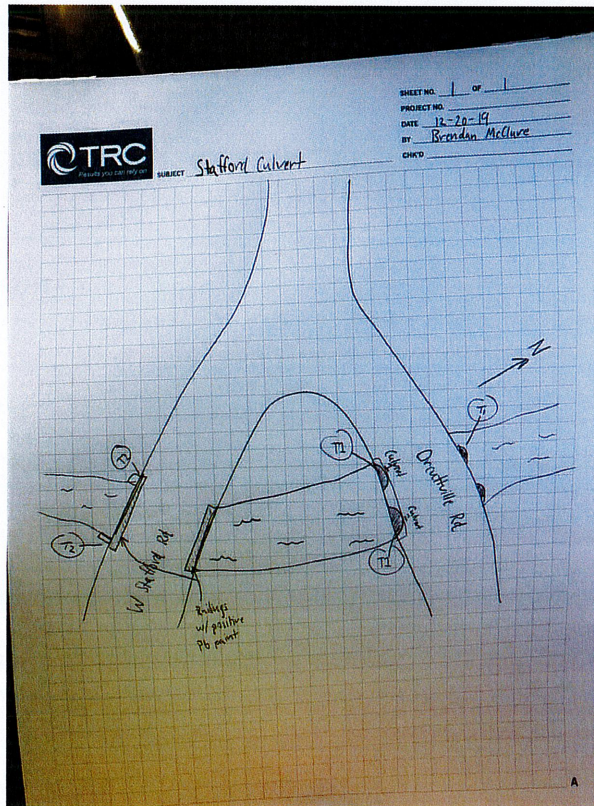
Sampled or Assumed?	Sampled
Material Acronym	T 2
Material Description	Black tar in bridge wall underneath road
Is Material a Non-Friable Organically Bound (NOB)	Yes
Homogeneous Area	West Stafford Rd under bridge
Total Approximate Quantity	~ 10 LF
Total Count	( 2 )
Total Count (number only)	2

## XRF Section

Niton XRF Model No.	25555
XRF Survey Completed	Yes
XRF Data Downloaded	No
XRF Shots >1.0 on non-metallic building materials	No
Date Data Downloaded	2019-12-20

## General Information

Site Sketch Diagrams





Signature

A handwritten signature in black ink, consisting of several fluid, connected strokes.

Signed 2019-12-20 17:23:46 UTC

Asbestos Samples Submitted to TRC Lab	Yes
Date Submitted to Lab	2019-12-20
App Name	WinBSI HBM Survey 1.0

### Generate Report Documentation

Select one or more documents below to be generated. Once completed in the cloud, they will be sent to the listed email address. Please report any difficulties or errors to Justin Coleman.

What documents should be generated?	Asbestos chain-of-custody
Where should the document(s) be sent?	eplimpton@trcsolutions.com
Generate Documents	N/A