July 1, 2016

Mr. Christopher Bonsignore, P.E.
Principal Engineer
Environmental Compliance Section
Bureau of Engineering and Highway Operations
State of Connecticut Department of Transportation
2800 Berlin Turnpike, P.O. Box 317546
Newington, CT 06131-7546

Attention: Judith Nemecek, P.E. / Felix Mathieu

Subject: On-Call Asbestos, Lead, Air Quality & Demolition Compliance
Agreement No. 04.27-01(15)
HazMat Inspection - Bridge No. 03127, Harrison Road over I-91, Wallingford, CT
ConnDOT Assignment No. 514-5352
ConnDOT Project No. 148-206
TRC Project No. 222165.5352.0710

Dear Mr. Bonsignore:

TRC performed a limited survey for hazardous building materials associated with the rehabilitation of Bridge No. 03127 in Wallingford, Connecticut. Results of the survey identified lead paint to be present on the structural steel/metal bridge components (0.1 mg/cm^2 – 21.2 mg/cm^2) and concrete abutments (0.1 mg/cm^2 & 0.22% by weight) of Bridge No. 03127. Results obtained from TCLP waste stream sampling and analysis for leachable lead from the paint on the structural steel/metal bridge components (390 mg/L) and railing/fence components (26 mg/L) characterized the paint waste streams at Bridge No. 03127 as EPA RCRA/CTDEEP hazardous waste. Results obtained from TCLP waste stream sampling and analysis for leachable lead from the paint on the concrete abutments (0.38 mg/L) characterized the paint waste stream as non-RCRA, non-hazardous waste. White caulking (C1) at the base of the railing supports and parapet walls was sampled and found to contain asbestos. Tar between sidewalk/curbstone, roadway expansion tar, tar on horizontal cork material, tar on drain pipes, tar sealant on plastic protection wrap on pipes, tar on metal pipes, cloth bearing pads, black vapor barrier between abutment/concrete deck and caulking between concrete parapet wall sections were sampled and found to contain **no** asbestos. No bird/pigeon guano accumulations were observed around in accessible areas of the bridge. Associated laboratory data, project description, site map and site photos are attached.

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

Very Truly Yours,

TRC

Erik R. Plimpton, P.E., CHMM, CMC
Vice President - Program Manager

E. Burke, P.E.
Engineer in Charge

TRC

Lead Based Paint Measurement Summary Table

Device(s):	Niton XLP301-A (Serial #25555) X Ray Fluorescence (XRF) Spectrum Analyzer
Site:	DOT Bridge No. 03127, Wallingford, CT
Project # :	222165.5352.00710
Date(s):	5/18/2016
Inspector:	Mike Kostruba (Lead Inspector/RA #002207)

Number	Interior/ Exterior	Location	Bridge No.	Structure	Feature	Material	Color	Condition	Reading (mg/cm2)	Precision (mg/cm2)	Depth Index	Duration (sec)	Date/Time
1			**Self Calibration**									94.1	5/18/2016 8:19
2			**0.0 Calibration**						0.0	0.0	1.0	2.7	5/18/2016 8:20
3			**0.7 Calibration**						0.6	0.1	1.0	5.7	5/18/2016 8:20
4			**3.5 Calibration**						3.4	0.1	1.2	17.8	5/18/2016 8:21
5	Exterior	Wallingford	Bridge No. 03127	Vertical post		Metal	Green	Defective	**2.4**	**0.2**	1.2	8.0	5/18/2016 8:53
6	Exterior	Wallingford	Bridge No. 03127	Vertical post		Metal	Green	Defective	**3.8**	**0.3**	1.4	6.5	5/18/2016 8:53
7	Exterior	Wallingford	Bridge No. 03127	Fence		Metal	Green	Defective	**6.3**	**1.1**	1.5	7.7	5/18/2016 8:54
8	Exterior	Wallingford	Bridge No. 03127	Fence	beam	Metal	Green	Defective	**0.8**	**0.1**	1.5	6.8	5/18/2016 8:55
9	Exterior	Wallingford	Bridge No. 03127	Fence	beam	Metal	Green	Defective	**3.2**	**0.5**	1.3	3.0	5/18/2016 8:55
10	Exterior	Wallingford	Bridge No. 03127	Parapet	Horiz. Suport	Metal	Green	Defective	**4.6**	**0.9**	1.7	2.4	5/18/2016 8:59
11	Exterior	Wallingford	Bridge No. 03127	Railing	support	Metal	Green	Defective	**4.3**	**0.7**	1.4	3.3	5/18/2016 9:00
12	Exterior	Wallingford	Bridge No. 03127	Girder		Metal	Green	Defective	**14.6**	**2.2**	1.8	4.5	5/18/2016 9:12
13	Exterior	Wallingford	Bridge No. 03127	Girder		Metal	Green	Defective	**17.1**	**2.7**	1.9	3.6	5/18/2016 9:13
14	Exterior	Wallingford	Bridge No. 03127	Girder		Metal	Green	Defective	**17.0**	**2.1**	1.8	5.4	5/18/2016 9:13
15	Exterior	Wallingford	Bridge No. 03127	Girder		Metal	Green	Defective	**18.1**	**7.2**	1.8	1.5	5/18/2016 9:13
16	Exterior	Wallingford	Bridge No. 03127	Girder		Metal	Green	Defective	**18.8**	**2.7**	1.8	3.9	5/18/2016 9:14
17	Exterior	Wallingford	Bridge No. 03127	Support Bar		Metal	Green	Defective	**11.9**	**3.8**	1.8	2.9	5/18/2016 9:14
18	Exterior	Wallingford	Bridge No. 03127	Support Bar		Metal	Grey	Defective	**0.1**	**0.0**	1.0	4.1	5/18/2016 9:15
19	Exterior	Wallingford	Bridge No. 03127	Support Bar		Metal	Grey	Defective	**12.2**	**2.1**	2.5	4.1	5/18/2016 9:15
20	Exterior	Wallingford	Bridge No. 03127	Rocker Bar		Metal	Grey	Defective	**21.2**	**2.2**	2.2	6.2	5/18/2016 9:16
21	Exterior	Wallingford	Bridge No. 03127	Rocker Bar		Metal	Grey	Defective	**13.9**	**1.9**	2.4	5.0	5/18/2016 9:16
22	Exterior	Wallingford	Bridge No. 03127	Girder		Metal	Green	Defective	**14.1**	**2.4**	1.8	3.9	5/18/2016 9:17
23	Exterior	Wallingford	Bridge No. 03127	Abutment	lower	Concrete	White	Defective	0.0	0.0	2.2	10.7	5/18/2016 9:25
24	Exterior	Wallingford	Bridge No. 03127	Rocker Bridge Pad		Concrete	White	Defective	**0.1**	**0.0**	2.0	24.3	5/18/2016 9:27
25			**0.0 Calibration**						0.0	0.0	1.0	3.8	5/18/2016 10:14
26			**0.7 Calibration**						0.7	0.1	1.1	4.2	5/18/2016 10:14
27			**3.5 Calibration**						3.4	0.3	1.3	5.9	5/18/2016 10:15

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

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. Erik Plimpton
TRC Environmental Consultants
21 Griffin Rd., North
Windsor, CT 06095

Analytical Report

CET# 6050570

Report Date:June 01, 2016
Project: CTDOT, Bridge
Project Number: Bridge 03127, Wallingford
PO Number: 222165.5352.0710

Connecticut Laboratory Certificate: PH 0116
Massachusetts laboratory Certificate: M-CT903

New York Certification: 11982
Rhode Island Certification: 199

CET # : 6050570
Project: CTDOT, Bridge
Project Number: Bridge 03127, Wallingford

SAMPLE SUMMARY

The sample(s) were received at 24.6°C.
This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
1	6050570-01	Paint Chip	5/18/2016 10:05	05/23/2016
2	6050570-02	Paint Chip	5/18/2016 12:00	05/23/2016
3	6050570-03	Paint Chip	5/18/2016 10:30	05/23/2016

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

Prep: EPA 3050B **Matrix: Paint Chip**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
6050570-03	3	**0.22**	0.10	%	1	B6E2612	05/26/2016	05/27/2016 17:12	

Analyte: TCLP Lead [EPA 6010C] **Analyst: SS**

Prep: EPA 3005A-1311 **Matrix: Extract**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
6050570-01	1	**390**	0.013	mg/L	1	B6E2730	05/27/2016	05/27/2016 17:48	
6050570-02	2	**26**	0.013	mg/L	1	B6E2730	05/27/2016	05/27/2016 17:52	

CET # : 6050570
Project: CTDOT, Bridge
Project Number: Bridge 03127, Wallingford

QUALITY CONTROL SECTION

Batch B6E2612 - EPA 6010C

Analyte	Result (%)	RL (%)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Blank (B6E2612-BLK1)					Prepared: 5/26/2016 Analyzed: 5/27/2016				
Lead	ND	0.10							

CET # : 6050570
Project: CTDOT, Bridge
Project Number: Bridge 03127, Wallingford

Batch B6E2730 - EPA 6010C

Analyte	Result (mg/L)	RL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Blank (B6E2730-BLK1)					Prepared: 5/27/2016 Analyzed: 5/27/2016				
Lead	ND	0.013							
LCS (B6E2730-BS1)					Prepared: 5/27/2016 Analyzed: 5/27/2016				
Lead	0.203	0.013	0.200		101	80 - 120			

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-tarer 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
RL	Reporting Limit
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 foun 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.

Connecticut Laboratory Certification PH0116
Massachussets Laboratory Certification M-CT903

New York Certification 11982
Rhode Island Certification 199

Questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

Sincerely,

David Ditta
Laboratory Director

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 Homogenity 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- The Analyte exceeds %RSD limits for the Initial Calibration. This is a non-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.

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 the specified detection limit
All analyses were performed in house unless a Reference Laboratory is listed.
Samples will be disposed of 30 days after the report date.

CET # : 6050570
Project: CTDOT, Bridge
Project Number: Bridge 03127, Wallingford

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 6010C in Soil	
Lead	CT,NY
EPA 6010C in Solid	
Lead	CT

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2016
NY	New York Certification (NELAC)	11982	04/01/2016

CET
COMPLETE ENVIRONMENTAL TESTING

6050570

N OF CUSTODY RECORD

CET # _____

Volatile Soils Only:

Date and Time in Freezer
Client:
CET:

80 Lupes Drive
Stratford, CT 06615
Tel: (203) 377-9984
Fax: (203) 377-9952
e-mail: cet1@cetlabs.com

Matrix: A=Air, S=Soil, W=Water, DW=Drinking W., C=Cassette, Solid, Wipe, Other (Specify)

Turnaround Time ** (check one): Same Day *, Next Day *, 2-3 Days *, Std (5-7 Days)

Organics: 8260 CT List, 8260 Aromatics, 8260 Halogens, SPLP 8260, TCLP 8260, CT ETPH, 8270 CT List, 8270 PNAs, PCBs, Pesticides, Herbicides

Metals (check all that apply): 13 Priority Poll, 8 RCRA, TOTAL Pb, TCLP Pb, SPLP, Field Filtered, Lab To Filter

Additional Analysis

Sample ID	Date/Time	Matrix	Same Day *	Next Day *	2-3 Days *	Std (5-7 Days)	8260 CT List	8260 Aromatics	8260 Halogens	SPLP 8260	TCLP 8260	CT ETPH	8270 CT List	8270 PNAs	PCBs	Pesticides	Herbicides	13 Priority Poll	8 RCRA	TOTAL Pb	TCLP Pb	SPLP	Field Filtered	Lab To Filter	TOTAL # OF CONT.	NOTE #
1	5/18/16 1005	Paint				X															X					
2	1200																				X					
3	1030																			X						
4	1040																				X					

PRESERVATIVE (Cl–HCl, N–HNO_3, S–H_2SO_4, Na–NaOH, C=Cool, O–Other)

CONTAINER TYPE (P–Plastic, G–Glass, V–Vial, ~~O–Other~~)

Soil VOCs Only (M=MeOH B=Sodium Bisulfate W=Water F=Empty Vial E=Encore)

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
[illegible]	5/20/16 -095	[illegible] 5-23-16 1020
[illegible]	5-23-16 1400	[illegible]

NOTES: only analyze sample #4, if detectable amounts of lead are found in #3
Sample 1 - Structural Steel paint - Green/orange
Sample 2 - Railing/Fence system paint Green/red.
Sample 3 - Concrete Abatement Paint - tan.

Client / Reporting Information

Company Name: TRC
Address: 21 Griffin Rd North
City: Windsor State: CT Zip: 06095
Report To: Erik Plimpton E-mail: Eplimpton@trcsolutions.com
Phone #: 860-298-9692 Fax #:

Project Information

Project Contact: Erik Plimpton PO #:
Project: Bridge 03127 Project #: 222165.5352.0710
Location: Wallingford CT Collector(s): MK/ES

QA/QC: ☑ Std ☐ Site Specific (MS/MSD) * ☐ RCP Pkg * ☐ DQAW *
Data Report: ☑ Email ☐ PDF ☐ Excel ☐ Other
RSR Reporting Limits (check one): ☐ GA ☐ GB ☐ SWP ☐ Other (specify)

Lab Use: Evidence of Cooling: Y or N
Temp Upon Receipt: 2.6 °C

SHEET 1 OF 1

* Additional charge may apply. ** TAT begins when the samples are received at the Lab and all issues are resolved. TAT for samples received after 3 p.m. will start on the next business day.

REV. 7/1/10

80 Lupes Drive
Stratford, CT 06615

COMPLETE ENVIRONMENTAL TESTING, INC.

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

Client: Mr. Erik Plimpton
TRC Environmental Consultants
21 Griffin Rd., North
Windsor, CT 06095

Analytical Report

CET# 6060082

Report Date:June 06, 2016
Project: CTDOT, Bridge
Project Number: Bridge 03127, Wallingford
PO Number: 222165.5352.0710

Connecticut Laboratory Certificate: PH 0116
Massachusetts laboratory Certificate: M-CT903

New York Certification: 11982
Rhode Island Certification: 199

SAMPLE SUMMARY

The sample(s) were received at 24.6°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
4	6060082-01	Paint Chip	5/18/2016 10:40	05/23/2016

Analyte: TCLP Lead [EPA 6020A] **Analyst: SS**

Prep: EPA 3005A-1311 **Matrix: Extract**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
6060082-01	4	**0.38**	0.013	mg/L	1	B6F0325	06/03/2016	06/03/2016 19:52	

CET # : 6060082
Project: CTDOT, Bridge
Project Number: Bridge 03127, Wallingford

QUALITY CONTROL SECTION

Batch B6F0325 - EPA 6020A

Analyte	Result (mg/L)	RL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Blank (B6F0325-BLK1)					Prepared: 6/3/2016 Analyzed: 6/3/2016				
Lead	ND	0.013							
LCS (B6F0325-BS1)					Prepared: 6/3/2016 Analyzed: 6/3/2016				
Lead	0.186	0.013	0.200		93.1	80 - 120			

80 Lupes Drive
Stratford, CT 06615

COMPLETE ENVIRONMENTAL TESTING, INC.

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

Quality Control Definitions and Abbreviations

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Batch	Samples that are analyzed together with the same method, sequence and lot of reagents within the same time period.
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RL	Reporting Limit
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 foun in duplicate spikes including amount that was spike.
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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.

Connecticut Laboratory Certification PH0116
Massachussets Laboratory Certification M-CT903

New York Certification 11982
Rhode Island Certification 199

Questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

Sincerely,

David Ditta
Laboratory Director

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 Homogenity 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.
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I- The Analyte exceeds %RSD limits for the Initial Calibration. This is a non-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.

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 the specified detection limit
All analyses were performed in house unless a Reference Laboratory is listed.
Samples will be disposed of 30 days after the report date.

CET # : 6060082
Project: CTDOT, Bridge
Project Number: Bridge 03127, Wallingford

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 6020A in Soil	
Lead	CT,NY

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2016
NY	New York Certification (NELAC)	11982	04/01/2016

CET

COMPLETE ENVIRONMENTAL TESTING, INC.

6060082

CUSTODY RECORD

CET # _____

Volatile Soils Only:

Date and Time in Freezer
Client:
CET:

80 Lupes Drive
Stratford, CT 06615
Tel: (203) 377-9984
Fax: (203) 377-9952
e-mail: cet1@cetlabs.com

Matrix: A=Air, S=Soil, W=Water, DW=Drinking W., C=Cassette, Solid, Wipe, Other (Specify)

Turnaround Time ** (check one): Same Day *, Next Day *, 2-3 Days *, Std (5-7 Days)

Organics: 8260 CT List, 8260 Aromatics, 8260 Halogens, SPLP 8260, TCLP 8260, CT ETPH, 8270 CT List, 8270 PNAs, PCBs, Pesticides, Herbicides

Metals (check all that apply): 13 Priority Poll, 8 RCRA, TOTAL Pb, TCLP Pb, SPLP, Field Filtered, Lab To Filter

Additional Analysis

Sample ID	Date/Time	Matrix	Same Day *	Next Day *	2-3 Days *	Std (5-7 Days)	8260 CT List	8260 Aromatics	8260 Halogens	SPLP 8260	TCLP 8260	CT ETPH	8270 CT List	8270 PNAs	PCBs	Pesticides	Herbicides	13 Priority Poll	8 RCRA	TOTAL Pb	TCLP Pb	SPLP	Field Filtered	Lab To Filter	TOTAL # OF CONT.	NOTE #
1	5/18/16 1005	Paint				X															X					
2	1200																				X					
3	1030																			X						
4	1040																				X					

PRESERVATIVE (Cl–HCl, N–HNO_3, S–H_2SO_4, Na–NaOH, C=Cool, O–Other)

CONTAINER TYPE (P–Plastic, G–Glass, V–Vial, O–Other)

Soil VOCs Only (M=MeOH B=Sodium Bisulfate W=Water F=Empty Vial E=Encore)

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
[signature]	5/20/16 -0915	[signature] 5-23-16 1020
[signature]	5-23-16 1400	RB [signature]

NOTES: only Analyze sample #4, if detectable amounts of Lead are found in #3
- Sample 1 - Structural Steel paint - Green/orange
sample 2 - Railing/Fence system paint Green/red.
Sample 3 - Concrete Abutment paint - tan.

Client / Reporting Information

Company Name: TRC

Address: 21 Griffin Rd North

City: Windsor State: CT Zip: 06095

Report To: Erik Plimpton E-mail: Eplimpton@tresolutions.com

Phone #: 860-298-9692 Fax #:

Project Information

Project Contact: Erik Plimpton PO #:

Project: Bridge 03127 Project #: 222165.5352.0710

Location: Wallingford CT Collector(s): MK/ES

QA/QC: ☒ Std ☐ Site Specific (MS/MSD) * ☐ RCP Pkg * ☐ DQAW *

Data Report: ☒ Email ☐ PDF ☐ Excel ☐ Other

RSR Reporting Limits (check one): ☐ GA ☐ GB ☐ SWP ☐ Other (specify)

Lab Use: Evidence of Cooling: Y or N
Temp Upon Receipt: 24.6 °C

SHEET 1 OF 1

* Additional charge may apply. ** TAT begins when the samples are received at the Lab and all issues are resolved. TAT for samples received after 3 p.m. will start on the next business day.

REV. 7/1/10

TRC

Edition: October 2009
Supersede Previous Edition

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

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

LAB ID #. 48095

PROJECT NUMBER	PROJECT NAME
222165.5352.0710	DOT, Bridge 03127, Wallingford, CT

SIGNATURE	INSPECTOR
[signature]	Michael Kostruba

TURNAROUND TIME

PLM:		8hr		24hr		48hr	x	3day
TEM:		24hr		48hr		3day	x	5day

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
1	5-18-16	0842		X	North curb	X					T1-Tar between curbstone and side walk, at base of curbstone and between side walk sections
2	5-18-16	0847		X	South curb	X				X	T1-Tar between curbstone and side walk, at base of curbstone and between side walk sections
3	5-18-16	0900		X	Roadway east end	X					T2-Roadway expansion joint tar
4	5-18-16	0902		X	Roadway west end	X				X	T2-Roadway expansion joint tar
5	5-18-16	1042		X	West abutment	X					T3-Tar on horizontal cork material running through abutment
6	5-18-16	1045		X	East abutment	X				X	T3-Tar on horizontal cork material running through abutment
7	5-18-16	1015		X	East abutment	X					T4-Tar coating on drain pipes at base of east abutment
8	5-18-16	1018		X	East abutment	X				x	T4-Tar coating on drain pipes at base of east abutment
9	5-18-16	1053		X	East end-under bridge	X					T5-Tar sealant on plastic protection wrap on pipe

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
[signature]	5-20-16	[signature] 5/20/16			
(Printed) Michael Kostruba	Time: 0940	(Printed) Kathleen Williamson 1000	(Printed)	Time:	(Printed)

Send results to EP

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

TRC

Edition: October 2009
Supersede Previous Edition

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

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

LAB ID #. 48095

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME							
222165.5352.0710	DOT, Bridge 03127, Wallingford, CT		PLM:		8hr		24hr		48hr	x	3day
			TEM:		24hr		48hr		3day	x	5day
SIGNATURE	INSPECTOR									
	Michael Kostruba									

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
10	5-18-16	1051		X	East end-under bridge	X				X	T5-Tar sealant on plastic protection wrap on pipe
11	5-18-16	1102		X	East end-under bridge	X					T6-Tar coating on metal pipe under plastic/fiberglass wrap
12	5-18-16	1106		X	East end-under bridge	X				X	T6-Tar coating on metal pipe under plastic/fiberglass wrap
13	5-18-16	1030		X	West abutment	X					RBP1-Cloth like rocker bearing pad
14	5-18-16	1101		X	East abutment	X					RBP1-Cloth like rocker bearing pad
15	5-18-16	1046		X	West abutment	X					VB1-Black vapor barrier between top of abutment and bottom of concrete deck
16	5-18-16	1105		X	East abutment	X				X	VB1-Black vapor barrier between top of abutment and bottom of concrete deck
17	5-18-16	0920		X	North side-railing system	X					C1-White caulk around base of railing system supports
18	5-18-16	0927		X	South side-railing system	X				X	C1-White caulk around base of railing system supports

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	5-20-16	5/20/16			
(Printed) Michael Kostruba	Time: 0940	(Printed) Kathleen Williamson 1000	(Printed)	Time:	(Printed)

Send results to EP

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

TRC

Edition: October 2009
Supersede Previous Edition

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

LAB ID #. 48095

PROJECT NUMBER	PROJECT NAME
222165.5352.0710	DOT, Bridge 03127, Wallingford, CT

SIGNATURE	INSPECTOR
	Michael Kostruba

PARAMETERS

TURNAROUND TIME

PLM:		8hr		24hr		48hr	x	3day
TEM:		24hr		48hr		3day	x	5day

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
19	5-18-16	0934		X	North side-concrete wall	X					C2-Soft, grey caulk between concrete wall joints below railing system
20	5-18-16	0939		X	South side-concrete wall	X				x	C2-Soft, grey caulk between concrete wall joints below railing system

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	5-20-16	5/20/16			
(Printed) Michael Kostruba	Time: 0940	(Printed) Kathleen Williamson 1000	(Printed)	Time:	(Printed)

Send results to EP

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

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

TRC
Results you can rely on

BULK ASBESTOS ANALYSIS REPORT

CLIENT: CT Department of Transportation

Lab Log #: 0048095
Project #: 222165.5352.0710
Date Received: 05/20/2016
Date Analyzed: 05/20/2016

Site: Bridge 03127, Wallingford, 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	Yes	No	--	---		ND	None
2	Black	Yes	No	--	---		ND	None
3	Black	Yes	No	--	---		ND	None
4	Black	Yes	No	--	---		ND	None
5	Black	Yes	No	--	---		ND	None
6	Black	Yes	No	--	---		ND	None
7	Black	Yes	No	--	---		ND	None
8	Black	Yes	No	--	---		ND	None
9	Black	Yes	No	--	20%	cellulose	ND	None
10	Black	Yes	No	--	20%	cellulose	ND	None
11	Black	Yes	No	--	---		ND	None
12	Black	Yes	No	--	---		ND	None
13	Yellow-Brown	Yes	No	--	90%	cellulose	ND	None
14	Yellow-Brown	Yes	No	--	90%	cellulose	ND	None
15	Black	Yes	No	--	60%	cellulose	ND	None
16	Black	Yes	No	--	60%	cellulose	ND	None
17	White	Yes	No	--	---		10%	Chrysotile

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

TRC
Results you can rely on

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

Sample No.	Color	Homogenous	Multi-Layered	Layer No.	Other Matrix Materials	Asbestos %	Asbestos Type
18	--	--	--	--	--	NA/PS	--
19	Grey	Yes	No	--	---	ND	None
20	Grey	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, 2016. TRC is accredited by the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC in the Industrial Hygiene Program (IHLAP) for PLM effective through October 1, 2016. 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
Kathleen Williamson, Laboratory Manager

Reviewed by: Margaret Flanagan
Margaret Flanagan, Approved Signatory

Date Issued
05/23/2016

NT 15828

Proscience Analytical Services, Inc.

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

TEM Bulk Chain of Custody Record

Date: 05/23/16

PO#: **C222165** Analysis Type: Chatfield **EPA N.O.B** Qualitative

Client: TRC

Client Job#: 222165.5352.0710

Client Job Ref./Loc.: CT DOT- Bridge 03127, Wallingford, CT

Relinquished by: K. Williamson-KWilliamson@trcsolutions.com

Received by: [illegible] 5/24/16 10:40 AM

Report to: E. Plimpton – EPlimpton@trcsolutions.com & SArienti@trcsolutions.com

Samplers Name: M. Kostruba

Turn Around 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**
2	48095	Tar	See COC		
4	48095	Tar			
6	48095	Tar			
8	48095	Tar			
10	48095	Tar			
12	48095	Tar			
16	48095	Vapor Barrier			
20	48095	Caulk			

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

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 #: 222165.5352.0710
Client Reference: CT DOT - Bridge 03127, Wallingford, CT
PO #: C222165
Client #: 297
Client Name: TRC Environmental Corp. (CT)

Batch: **NT 15828**
Method: NOB
Date Received: 5/24/2016
Date Analyzed: 5/26/2016
Date of Report: 5/26/2016

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	ANT	TRE						
NT120465		Tar		.4724	.00	.00	.00	.00	.00	.00	15.25	64.20	20.55	ND	Yes	No
NT120466	4	Roadway Expansion joint Tar		.1497	.00	.00	.00	.00	.00	.00	17.16	54.78	28.06	ND	Yes	No
NT120467	6	Tar		.3244	.00	.00	.00	.00	.00	.00	25.24	67.45	7.31	ND	Yes	No
NT120468	8	Tar Coating		.3255	.00	.00	.00	.00	.00	.00	14.81	78.37	6.82	ND	Yes	No
NT120469	10	Tar Sealant		.2235	.00	.00	.00	.00	.00	.00	23.45	54.85	21.70	ND	Yes	No
NT120470	12	Tar Coating		.0724	.00	.00	.00	.00	.00	.00	3.59	69.48	26.93	ND	Yes	No
NT120471	16	Black Vapor Barrier		.1064	.00	.00	.00	.00	.00	.00	2.82	86.94	10.24	ND	Yes	No
NT120472	20	Soft, Grey Caulk		1.1829	.00	.00	.00	.00	.00	.00	40.37	44.93	14.70	ND	Yes	No

Comments:

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

Aimee Cormier, Analyst

SHEET NO. 2 OF

PROJECT NO.

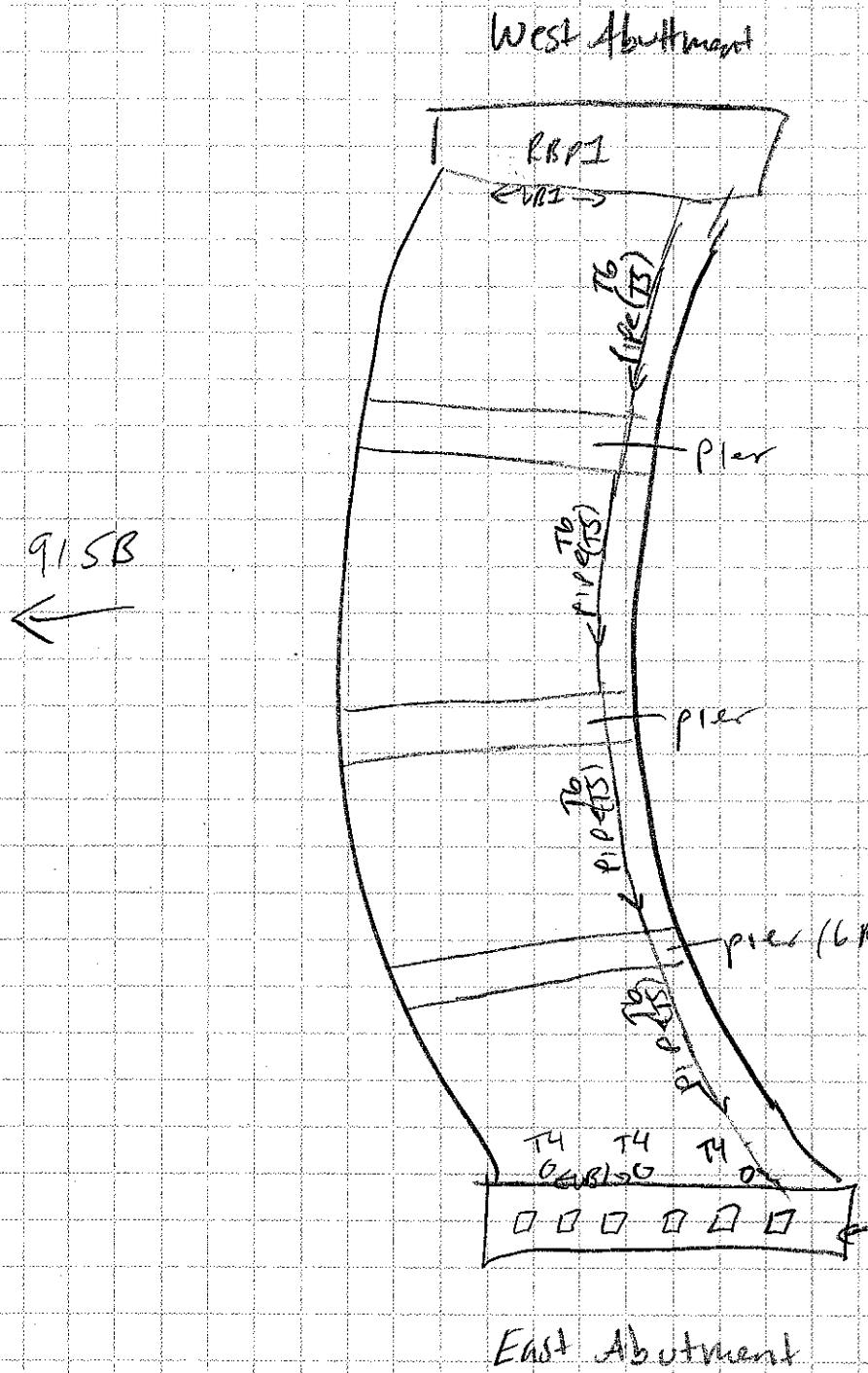
DATE 5/18/16

BY MK/ES

CHK'D

TRC Results you can rely on

SUBJECT Bridge 03127-Underside



- No Guano seen.
- T4 - East Side only
  3 - Drain pipes

T5 on pipe - 4SF every 15 LF
T6 - under Foam insulation on pipe
conc. Deck Bare

All structural Steel/R bearings
Green paint/orange

RBP1 - under all Rocker Bearings

Abutment - Lower Face tan painted.

VB1 - at top of Abut, where meets Deck

- Silicone at pipe hanger Supports

6 Rocker Bearings each Abut w/RBP1

A

SHEET NO. 1 OF

PROJECT NO.

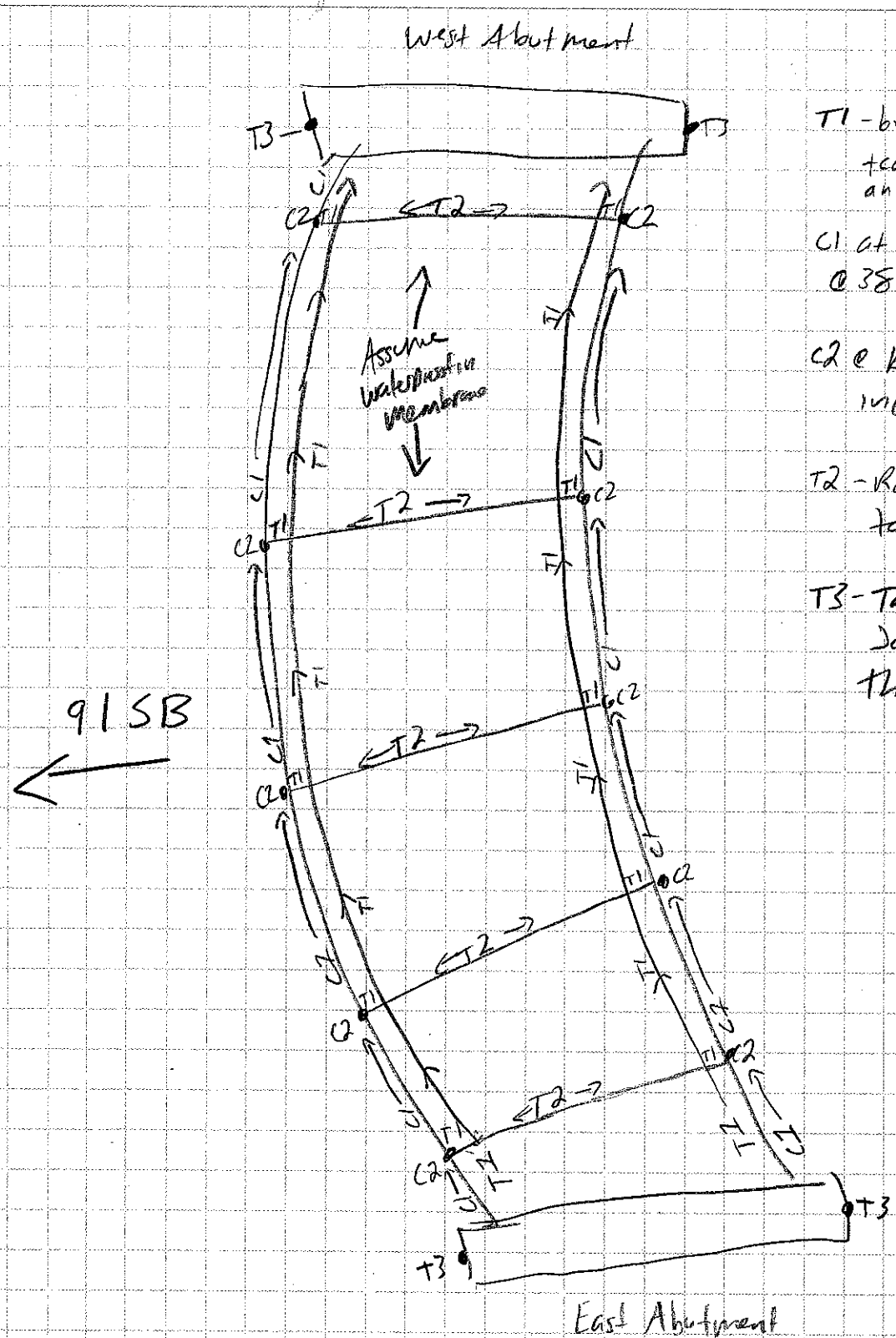
DATE 5/18/16

BY MK/ES

CHK'D

TRC Results you can rely on

SUBJECT Bridge 03127 - TOPSide



T1 - between curb stone + concrete sidewalk and at base of curb, + between sidewalk joints

C1 at base of Railing Support @ 38 each side

C2 @ Roadway exp. Joints in concrete wall of bridge

T2 - Roadway expansion joint tar

T3 - Tar on Cork expansion Joint - Horizontally thru Abutment

A

State Bridge Program
State Project No. 148-206
Bridge No. 03127 in Wallingford
Harrison Road over I-91

Purpose and Description of Project

Bridge No. 03127, built in 1965, is a four span structure which carries Harrison Road over Interstate 91 in the town of Wallingford. The structure is located approximately 0.7 miles southwest of Route 150 and situated between interchanges 13 and 14 on I-91.

Bridge No. 03127 consists of a four span, multi-girder steel structure with a reinforced concrete deck supported by reinforced concrete abutments and piers. The existing structure has a maximum span length of 90 feet with an overall length of 282 feet. The curb-to-curb width is 30 feet which is consistent with the approach roadway width. There is a 1.5-foot concrete safetywalk on the north side of the bridge and a 5.6-foot sidewalk on the south side of the bridge. The total out-to-out deck width of the structure is 39.6 feet. The structure has a skew angle of 15 degrees with a curved deck. The estimated 2013 Average Daily Traffic (ADT) on the bridge is 3,720 vehicles. The 2013 ADT on I-91 below the structure is 79,000 vehicles. The State's rights-of-way for I-91 at the bridge site encompasses Bridge No. 03127 in its entirety.

The reinforced concrete deck is in fair condition (Overall Rating = 5). There are areas of large haunch spalls with exposed rebar, mostly located at the fascia girders. The superstructure is in poor condition (Overall Rating = 4). The steel girders have areas of peeling paint and rust with the worst areas located on the fascia beams. The reinforced concrete abutments and piers are in satisfactory condition (Overall Rating = 6). Overhead electrical, telecommunications, and cable television lines exist on the south side of the bridge with posts located just off the bridge at the northwest and southwest corners. A 10" water main runs through the superstructure in the north bay.

The project will rehabilitate the bridge deck and paint the deteriorated steel superstructure. The existing bituminous concrete and membrane waterproofing on the deck will be removed, full and partial depth patch work will be performed. A new membrane waterproofing will be applied, new bituminous concrete will be overlaid and new asphaltic plug expansion joints installed. The superstructure steel will be cleaned and repaired at all locations required and all structural steel members will be painted. The expansion bearings on both abutments and piers 2 and 3 will be replaced and the fixed bearings will be cleaned and painted. The haunches over I-91 will be removed. Concrete keeper blocks will be added at the expansion ends of the deck. The substructure will be repaired as necessary. The concrete sidewalk and parapets will be repaired as necessary. The approach roadway will be paved for a minimum distance beyond the end of the bridge and the guiderail will be updated at three of the corners of the bridge that had not been previously updated. Concrete transition curbing will be added at the blunt ends of the sidewalk and safetywalk curb.

Construction will be performed in two stages while maintaining one 12-foot lane of alternating one-way traffic controlled by temporary signalization on Harrison Road. Temporary off peak lane closures of I-91 will be necessary to perform certain activities. Pedestrian traffic across the structure will be maintained for the duration of the project.

A location map is included for reference.

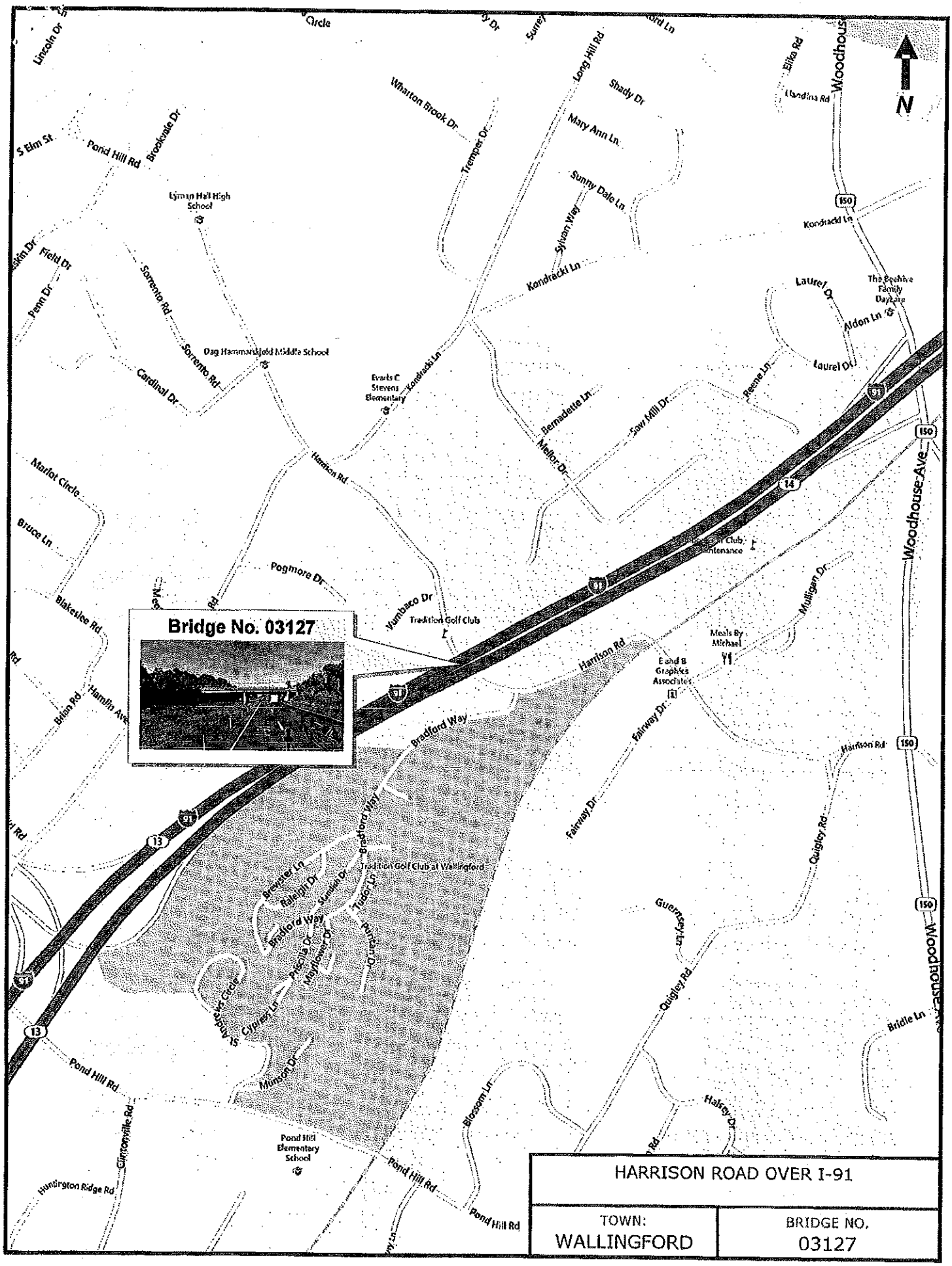

Bridge No. 03127
N
Harrison Rd
Woodhouse Ave
Long Hill Rd
Wharton Brook Dr
Tremper Dr
Shady Dr
Mary Ann Ln
Sunny Dale Ln
Sylvan Way
Kondracki Ln
Laurel Dr
Aldon Ln
Bernadette Ln
Sawi Mill Dr
Mellor Dr
Reene Ln
Mulligan Dr
Fairway Dr
Quigley Rd
Guernsey Ln
Bridle Ln
Harvey Dr
Blossom Ln
Pond Hill Rd
Munson Dr
Cypress Ln
Priscilla St
Mayflower Dr
Pilgrim Dr
Tudor Ln
Sundial Dr
Raleigh Dr
Brewster Ln
Bradford Way
Tradition Golf Club at Wallingford
Tradition Golf Club
Yumbaco Dr
Pogmore Dr
Hamlin Ave
Brian Rd
Blakeslee Rd
Bruce Ln
Marlot Circle
Hamlin Rd
Cardinal Dr
Sorrento Rd
Penn Dr
Field Dr
Pond Hill Rd
Brookvale Dr
S Elm St
Lincoln Dr
Elka Rd
Handina Rd
Kondracki Ln
The Beehive Family Daycare
Meals By Michael
E and B Graphics Associates
Evarts C Stevens Elementary
Dag Hammarskjold Middle School
Lyman Hall High School
Pond Hill Elementary School
Clintonville Rd
Huntington Ridge Rd
St Andrews Circle
Hartford Rd
Woodhouse Ave
91
13
150
14
HARRISON ROAD OVER I-91
TOWN:
WALLINGFORD
BRIDGE NO.
03127

PHOTO 1
Bridge No. 03127 – West view

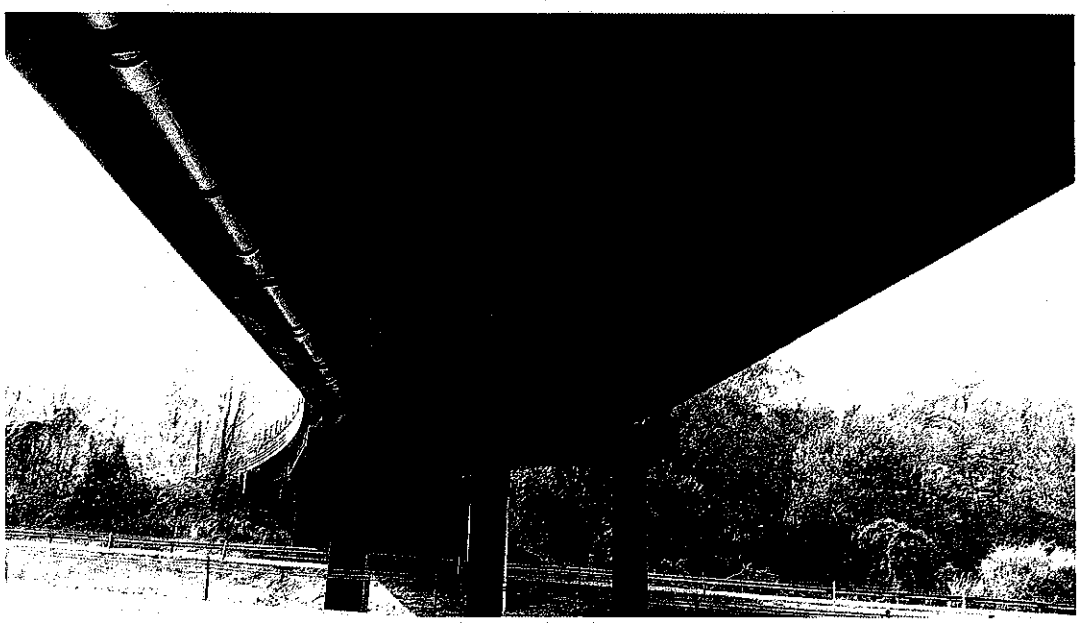


PHOTO 2
Bridge No. 03127 - Underside view