



May 16, 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: A. Fox, P.E. / S. Clout

Subject: On-Call Asbestos, Lead, Air Quality & Demolition Compliance  
Agreement No. 04.27-01(15)  
HazMat Inspection - Bridge Nos. 02514A & 02514B, I-95 SB Goldstar Bridge and associated  
Sign Support Nos. 21216, 21217 & 21218 over the Thames River, Groton & New London, CT  
ConnDOT Assignment No. 514-5323  
ConnDOT Project No. 94-252  
TRC Project No. 222165.5323.0710

Dear Mr. Bonsignore:

TRC performed a limited survey for hazardous building materials associated with the renovation of Bridge No. 02514A & 02514B (The SB side of the Goldstar Bridge) and 3 associated sign supports Nos. 21216, 21217 & 21218 over the Thames River in New London, Connecticut. Results of the survey identified lead paint to be present on the structural steel/metal bridge components (0.013% by weight) of Bridge Nos. 02514A and 02514B. Results of the survey also identified detectable levels of lead paint to be present on the drain pipes (0.1 mg/cm<sup>2</sup>) as well as the sign support structures 21216, 21217 & 21218 (0.0 mg/cm<sup>2</sup> – 0.3 mg/cm<sup>2</sup>). Results obtained from TCLP waste stream sampling and analysis for leachable lead from the paint on the structural steel/metal bridge components of Bridge Nos. 02514A & 02514B (ND<0.013 mg/L) and sign structures 21216, 21217 and 21218 (1.9 mg/L) characterized the paint waste streams as non-hazardous, non-RCRA waste. No paint was identified on concrete abutments, piers and decking, therefore no lead was present. Off-white seam caulking between concrete wall sections along sidewalk/base of street lights of Bridge Nos. 02514A & 02514B, black caulking along embankment/abutment of Bridge No 02514B and tan caulking around the base of sign supports 21216, 21217 and 21218 were sampled and found to contain asbestos. Gray caulking on the north side along embankment/abutment, gray caulking along the sidewalk of abutment/bridge, black road patching tar found along road seams and black tar board expansion joints on the north side embankment/abutment were sampled and found to contain no asbestos. No bird/pigeon guano accumulations were observed 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**

A handwritten signature in black ink, appearing to read "Erik R. Plimpton".

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

A handwritten signature in blue ink, appearing to read "E. Burke".

E. Burke, P.E.  
Engineer in Charge



**Lead Based Paint Measurement Summary Table**

Device(s): Niton XLP301-A (Serial #24792) X Ray Fluorescence (XRF) Spectrum Analyzer  
 Site: DOT Bridge #2514B New London, CT  
 Project #: 222165.5323.00710  
 Date(s): 4/11/2016  
 Inspector: Chris Gaines (Lead Inspector #002219)

Number	Interior/ Exterior	Location	Bridge No.	Structure	Feature	Material	Color	Condition	Reading (mg/cm2)	Precision (mg/cm2)	Depth Index	Duration (sec)	Date/Time
1									1.3	0.0		233.3	4/11/2016 10:32
2									0.0	0.0	5.0	6.4	4/11/2016 10:37
3									3.7	0.2	1.3	18.3	4/11/2016 10:38
4													
5	Exterior	New London	Bridge No. 02514B	Bridge	Rocker Bearing	Metal	Blue	Intact	0.8	0.1	1.1	3.7	4/11/2016 10:38
6	Exterior	New London	Bridge No. 02514B	Bridge	Rocker Bearing	Metal	Blue	Intact	0.0	0.0	1.0	0.3	4/11/2016 11:05
7	Exterior	New London	Bridge No. 02514B	Bridge	Span Beam	Metal	Blue	Intact	0.0	0.0	1.4	7.2	4/11/2016 11:05
8	Exterior	New London	Bridge No. 02514B	Bridge	Span Beam	Metal	Blue	Intact	0.0	0.0	1.0	1.7	4/11/2016 11:07
9	Exterior	New London	Bridge No. 02514B	Bridge	Cross Beam	Metal	Blue	Intact	0.0	0.0	1.0	1.5	4/11/2016 11:07
10	Exterior	New London	Bridge No. 02514B	Bridge	Cross Beam	Metal	Blue	Intact	0.0	0.0	1.5	4.5	4/11/2016 11:08
11	Exterior	New London	Bridge No. 02514B	Bridge	Span Beam	Metal	Blue	Intact	0.0	0.0	1.1	1.8	4/11/2016 11:10
12	Exterior	New London	Bridge No. 02514B	Bridge	Rocker Bearing	Metal	Blue	Intact	0.0	0.0	1.0	1.7	4/11/2016 11:11
13	Exterior	New London	Bridge No. 02514B	Bridge	Drain Pipe	Metal	Blue	Intact	0.0	0.0	1.3	1.2	4/11/2016 11:12
14	Exterior	New London	Bridge No. 02514B	Bridge	Drain Pipe	Metal	Blue	Intact	0.1	0.1	3.9	5.5	4/11/2016 11:13
15									0.1	0.1	1.6	4.5	4/11/2016 11:14
16	Exterior	New London	Bridge No. 02514B	Sign 21216	Base	Metal	Green	Intact	1.2	0.0		244.7	4/11/2016 12:00
17	Exterior	New London	Bridge No. 02514B	Sign 21216	Column	Metal	Green	Intact	0.1	0.1	2.5	6.8	4/11/2016 12:06
18	Exterior	New London	Bridge No. 02514B	Sign 21216	Column Cross	Metal	Green	Intact	0.2	0.1	3.0	5.7	4/11/2016 12:07
19	Exterior	New London	Bridge No. 02514B	Sign 21217	Column Cross	Metal	Green	Intact	0.1	0.1	2.1	4.2	4/11/2016 12:09
20	Exterior	New London	Bridge No. 02514B	Sign 21217	Column	Metal	Green	Intact	0.3	0.2	3.7	4.0	4/11/2016 12:23
21	Exterior	New London	Bridge No. 02514B	Sign 21217	Column Base	Metal	Green	Intact	0.2	0.1	3.5	4.7	4/11/2016 12:24
22	Exterior	New London	Bridge No. 02514B	Sign 21218	Column Base	Metal	Green	Intact	0.2	0.1	3.9	4.4	4/11/2016 12:25
23	Exterior	New London	Bridge No. 02514B	Sign 21218	Column Base	Metal	Green	Intact	0.0	0.0	1.8	0.2	4/11/2016 13:21
24	Exterior	New London	Bridge No. 02514B	Sign 21218	Column	Metal	Green	Intact	0.0	0.0	1.1	1.3	4/11/2016 13:21
25	Exterior	New London	Bridge No. 02514B	Sign 21218	Column Cross	Metal	Green	Intact	0.0	0.0	2.7	12.3	4/11/2016 13:22
26									0.0	0.0	1.6	4.8	4/11/2016 13:23
27									3.5	0.3	1.3	6.9	4/11/2016 13:33
28									0.0	0.0	1.0	2.0	4/11/2016 13:34
									0.7	0.2	1.0	2.5	4/11/2016 13:34

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



21 GRIFFIN ROAD NORTH

WINDSOR, CONNECTICUT 06095

TELEPHONE (860) 298-9692

FAX (860) 298-6380

Edition: September 2007  
Supersede Previous Edition

### CHAIN OF CUSTODY

PROJECT NUMBER  
22465-5373-010

PROJECT NAME  
CMBOT - Box 2514A  
I-95 - Colchester Bridge

LAB ID # 022205

INSPECTOR: (SIGNATURE)

(PRINTED)  
Gregory Kucyph

TYPE

COMF

GRAB

TIME

DATE

FIELD  
SAMPLE  
NUMBER

SAMPLE LOCATION

NOTES

TURNAROUND TIME

24hr

48hr

3day

48hr

3day

5day

5day

461A  
542881  
02  
03  
24

FIELD SAMPLE NUMBER	DATE	TIME	COMF	GRAB	SAMPLE LOCATION	TYPE	INSPECTOR: (SIGNATURE)	PROJECT NAME	LAB ID #	TURNAROUND TIME	NOTES
01	5/3/16	1235	X	X	Box 2514A (B-side)	X		CMBOT - Box 2514A	022205	24hr	Green Structural steel painted
02	5/3/16	1240	X	X	↓	X		I-95 - Colchester Bridge	022205	48hr	underside of bridge
03	5/3/16	1310	X	X	2514B (West side)	X			022205	48hr	
04	5/3/16	1320	X	X	↓	X			022205	5day	

Relinquished by: (Signature)

Date: 5/3/16  
Time: 1530

Received by: (Signature)

Date: 5/14/16 9:52a  
Time: (Printed)

Relinquished by: (Signature)

Date: (Printed)  
Time: (Printed)

Remarks  
Gregory Kucyph



**ProScience Analytical Services, Inc.**  
 22 Cummings Park, Woburn, MA 01801

Telephone: 781-935-3212  
 Facsimile: 781-932-4857  
 Email: [chemistry@proscience.net](mailto:chemistry@proscience.net)

### Laboratory Report

Contact: Greg Kaczynski  
 Client: TRC  
 Address: 21 Griffin Road North  
 Windsor, CT 06095

Batch #: C 288125  
 Date received: 5/4/2016  
 Date analyzed: 5/4/2016  
 Date of report: 5/4/2016

Project # 222165.5323.0710  
 P.O.# C222165

AIHA-LAP, LLC Lab ID 102754

Project Site: ConnDOT-Bridge 2514A28, I-95 S  
 Goldstar Bridge

**Lead Analysis In Paint Using SOP Based on SW846-7420/3051**  
 Results in weight percent on an "as received" weight basis

Lab ID	Client ID	Sample date	Description	Result	Reporting Limit	Comments
C 548881	1	5/3/16	Bridge 2514A(East Side)-Gray StructuralPaint On Underside of Bridge	0.013	0.0054	
C 548882	2	5/3/16	Bridge 2514A(East Side)-Gray StructuralPaint On Underside of Bridge	<RL	0.0054	
C 548883	3	5/3/16	Bridge 2514B(West Side)-Gray StructuralPaint On Underside of Bridge	<RL	0.027	
C 548884	4	5/3/16	Bridge 2514B(West Side)-Gray StructuralPaint On Underside of Bridge	<RL	0.013	

  
 Simona Peavey, Tech. Manager Chemistry  
 Aimee Cormier, Lab Director

Unless otherwise indicated, all samples were received in acceptable condition.  
 All result apply only to the samples as received and are accurate to no more than two significant figures.  
Unless otherwise indicated, all the quality control criteria for the method above have been met.  
 RL-Reporting Limit(%by weight) Note on units: mg/Kg is the same as ppm by weight.

80 Lupes Drive  
Stratford, CT 06615



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

Client: Mr. Chris Gaines  
TRC Environmental Consultants  
21 Griffin Rd., North  
Windsor, CT 06095

# Analytical Report

## CET# 6040257

Report Date: April 15, 2016  
Project: CTDOT, Bridge  
Project Number: Goldstar Bridge SB+3 Sign Structures  
PO Number: 222165.5323.0710

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



New York Certification: 11982  
Rhode Island Certification: 199

CET #: 6040257

Project: CTDOT, Bridge

Project Number: Goldstar Bridge SB+3 Sign Structures

**SAMPLE SUMMARY**

The sample(s) were received at 6.1°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
01 Bridge Beams 02514B	6040257-01	Paint Chip	4/11/2016 11:00	04/12/2016
03 Signs 21216,21217,21218	6040257-02	Paint Chip	4/11/2016 12:50	04/12/2016

**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
6040257-01	01 Bridge Beams 02514B	ND	0.10	%	1	B6D1420	04/14/2016	04/14/2016 19:35	

**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
6040257-02	03 Signs 21216,21217,21218	1.9	0.013	mg/L	1	B6D1435	04/14/2016	04/14/2016 17:31	

CET #: 6040257

Project: CTDOT, Bridge

Project Number: Goldstar Bridge SB+3 Sign Structures

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 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- 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 # : 6040257

Project: CTDOT, Bridge

Project Number: Goldstar Bridge SB+3 Sign Structures

### CERTIFICATIONS

#### Certified Analyses included in this Report

Analyte	Certifications
<i>EPA 6010C in Soil</i>	
Lead	CT,NY
<i>EPA 6010C in Solid</i>	
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



80 Lupes Drive  
Stratford, CT 06615



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

Client: Mr. Stephen Arienti  
TRC Environmental Consultants  
21 Griffin Rd., North  
Windsor, CT 06095

# Analytical Report

## CET# 6050172

Report Date: May 09, 2016  
Project: CTDOT, Bridge  
Project Number: Bridge 02514A/B, Groton  
PO Number: 222165.5323.0710

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



New York Certification: 11982  
Rhode Island Certification: 199

CET # : 6050172

Project: CTDOT, Bridge

Project Number: Bridge 02514A/B, Groton

**SAMPLE SUMMARY**

The sample(s) were received at 20.5°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
01	6050172-01	Paint Chip	5/03/2016 12:00	05/06/2016

**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
6050172-01	01	ND	0.013	mg/L	1	B6E0918	05/09/2016	05/09/2016 15:06	

CET # : 6050172

Project: CTDOT, Bridge

Project Number: Bridge 02514A/B, Groton

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 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- 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 # : 6050172

Project: CTDOT, Bridge

Project Number: Bridge 02514A/B, Groton

### CERTIFICATIONS

#### Certified Analyses included in this Report

Analyte	Certifications
<i>EPA 6010C in Soil</i>	
Lead	CT,NY

Complete Environmental Testing operates under the following certifications and accreditations:

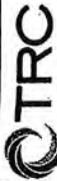
Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2016
NY	New York Certification (NELAC)	11982	04/01/2016

Complete Environmental Testing, Inc.

80 Lupes Drive, Stratford, CT 06615 • Tel: 203-377-9984 • Fax: 203-377-9952 • www.cetlabs.com



6050172



21 GRIFFIN ROAD NORTH

WINDSOR, CONNECTICUT 06095

TELEPHONE (860) 298-9692

FAX (860) 298-6380

# TCLP CHAIN OF CUSTODY

Edition: November 2013  
Supersede Previous Edition

PROJECT NUMBER

222-166-5323, 0710

PROJECT NAME

CITOUT - Bridge 02514A/B  
(Goldstar) Groton, CT

INSPECTOR: (SIGNATURE)

*[Signature]*

(PRINTED)

S. Ariandi

LAB ID #.

TURNAROUND TIME

24hr	48hr	3day	5day
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24hr	48hr	3day	5day
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

PARAMETERS

RCRA Pb

RCRA Pb, AS, CR, CD

8 RCRA Metals

TCLP Pb

SPLP Pb

MATERIAL

Paint Chips

SAMPLE LOCATION

Bridge 02514A/B

TYPE  
COMP GRAB

TIME

DATE

FIELD SAMPLE NUMBER

5/3/16 1200 X

Relinquished by: (Signature)

*[Signature]*

(Printed)

Stephen Ariandi

Date:

5/5/16

Time:

1700

Received by: (Signature)

*[Signature]*

(Printed)

Paul via Fed Ex

Relinquished by: (Signature)

*[Signature]*

(Printed)

Liz Ranker

Date:

5/16/16

Time:

14:05

Received by: (Signature)

*[Signature]*

(Printed)

Liz Ranker



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 #. 47889

PROJECT NUMBER 222165.5323.0710		PROJECT NAME CTDOT - Goldstar Bridge #02514B & Signs 21216,21217,21218		INSPECTOR Chris Gaines		PARAMETERS		TURNAROUND TIME									
						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)	PLM:	TEM:	8hr	24hr	48hr	3day	5day
FIELD SAMPLE NUMBER	DATE	TIME	TYPE	COMP	GRAB	SAMPLE LOCATION	MATERIAL										
01	4-11-16	1048				Bridge North side along embankment/abutment	C1 - Grey caulk	X									
02	4-11-16	1049				Bridge North side along embankment/abutment	C1 - Grey caulk	X									
03	4-11-16	1135				Along sidewalk of abutment/bridge	C2 - flexible grey caulk	X									
04	4-11-16	1136				Along sidewalk of abutment/bridge	C2 - flexible grey caulk	X									
05	4-11-16	1140				Between concrete wall sections along sidewalk	C3 - off white hard caulk	X									
06	4-11-16	1141				Base of streetlights on sidewalk wall	C3 - off white hard caulk	X									
07	4-11-16	1153				Around base of sign supports	C4 - tan caulk	X									
08	4-11-16	1153				Around base of sign supports	C4 - tan caulk	X									
09	4-11-16	1325				Bridge South Side along embankment/abutment	C5 - black pliable caulk	X									
Relinquished by: (Signature) <i>Chris Gaines</i>		Date: 4-11-16		Received by: (Signature) <i>Williamson</i>		Date: 4/12/16		Relinquished by: (Signature)		Date:		Received by: (Signature)					
(Printed) Chris Gaines		Time: 1950		(Printed) Williamson		Time: 0800		(Printed)		Time:		(Printed)					
Remarks:								Condition of Samples: Acceptable: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				Page 1 of 5					



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 #. 47889

PROJECT NUMBER 222165.5323.0710		PROJECT NAME CTDOT - Goldstar Bridge #02514B & Signs 21216,21217,21218		INSPECTOR Chris Gaines		PARAMETERS		TURNAROUND TIME				
						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)	PLM:	8hr
FIELD SAMPLE NUMBER	DATE	TIME	TYPE	COMP	GRAB	SAMPLE LOCATION	MATERIAL	TEM:	24hr	48hr	3day	5day
									x	x		
10	4-11-16	1326				Bridge South Side along embankment/abutment	C5 - black pliable caulk	X				
11	4-11-16	1131				Asphaltic plugs on roadway	RT1 - black road tar		X			
12	4-11-16	1132				Asphaltic plugs on roadway	RT1 - black road tar	X				
13	4-11-16	1050				Bridge North side along embankment/abutment	EJ1 - tar board expansion joint					
14	4-11-16	1057				Bridge North side along embankment/abutment	EJ1 - tar board expansion joint	X				
15	4-11-16	1053				Bridge North side - side of abutment	EJ2 - black tar board	X				
16	4-11-16	1054				Bridge North side - side of abutment	EJ2 - black tar board	X				

Relinquished by: (Signature) 	Received by: (Signature) 	Date: 4-11-16	Date: 4/12/16
(Printed) Chris Gaines	(Printed) 	Time: 1950	Time: DPOD
Remarks:	Condition of Samples: Acceptable: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Comments:	
			Page 2 of 5



**BULK ASBESTOS ANALYSIS REPORT**

CLIENT: CT Department of Transportation

Lab Log #: 0047889  
 Project #: 222165.5323.0710  
 Date Received: 04/12/2016  
 Date Analyzed: 04/14/2016

Site: Goldstar Bridge #02514B & Signs 21216, 21217 & 21218

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

Sample No.	Color	Homogenous	Multi-Layered	Layer No.	Other Matrix Materials	Asbestos %	Asbestos Type
01	Grey	Yes	No	--	---	ND	None
02	Grey	Yes	No	--	---	ND	None
03	Grey	Yes	No	--	---	ND	None
04	Grey	Yes	No	--	---	ND	None
05	Off White	Yes	No	--	---	10%	Chrysotile
06	--	--	--	--	--	NA/PS	--
07	Tan	Yes	No	--	---	ND	None
08	Tan	Yes	No	--	---	ND	None
09	Black	Yes	No	--	---	ND	None
10	Black	Yes	No	--	---	ND	None
11	Black	Yes	No	--	---	ND	None
12	Black	Yes	No	--	---	ND	None
13	Black	Yes	No	--	---	ND	None
14	Black	Yes	No	--	---	ND	None
15	Black	Yes	No	--	---	ND	None
16	Black	Yes	No	--	---	ND	None

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# LT000411
RI #AAL-007 TX #300354	VT #AL014538 LA#05011	VA #3333 000283	AZ #A20944	HI #L-09-004	NJ #CT004	CA #2907
CO# AL-15020	PHIL# 461	PA#68-03387				



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

Sample No.	Color	Homogenous	Multi-Layered	Layer No.	Other Matrix Materials	Asbestos %	Asbestos Type
------------	-------	------------	---------------	-----------	------------------------	------------	---------------

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), and the EPA recommended Method for the Determination of Asbestos in Bulk Building Materials (EPA/600/R-93/116), July 1993, R.L. Perkins and B.W. Harvey which utilizes 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 an American Industrial Hygiene Association (AIHA) accredited lab 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 the QC data related to the samples is available upon written request from the 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: Margaret Flanagan Date Issued: 04/14/2016  
 Kathleen Williamson, Laboratory Manager Margaret Flanagan, 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# LT000411  
 RI #AAL-007 TX #300354 VT #AL014538 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 #: 222165.5323.0710  
 Client Reference: CT-DOT Goldstar Bridge #02514B & Signs 21216,21217 & 21218  
 PO #: C222165  
 Client #: 297  
 Client Name: TRC Environmental Corp. (CT)

Batch: NT 15737  
 Method: NOB  
 Date Received: 4/15/2016  
 Date Analyzed: 4/19/2016  
 Date of Report: 4/19/2016

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						
NT119949	02	Grey Caulk		.1640	.00	.00	.00	.00	.00	.00	.00	37.38	25.30	ND	Yes	No
NT119950	04	Flexible Grey Caulk		.3432	.00	.00	.00	.00	.00	.00	.00	35.14	26.72	ND	Yes	No
NT119951	08	Tan Caulk		1.0759	1.90	.00	.00	.00	1.90	.00	.00	1.57	3.53	3.80	Yes	No
NT119952	10	Black Pliable Caulk		.4321	10.48	.00	.00	.00	.00	.00	.00	63.32	21.71	10.48	Yes	No
NT119953	12	Black Road Tar		.5177	.00	.00	.00	.00	.00	.00	.00	61.14	29.15	ND	Yes	No
NT119954	14	Tar Board Expansion Joint		.4729	.00	.00	.00	.00	.00	.00	.00	78.24	4.99	ND	Yes	No
NT119955	16	Black Tar Board		.5091	.00	.00	.00	.00	.00	.00	.00	42.19	18.44	ND	Yes	No

**Comments:**

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

  
 Mark Derosier, Analyst



CDOT

SUBJECT Goldstar Bridge SB #02514B

SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_

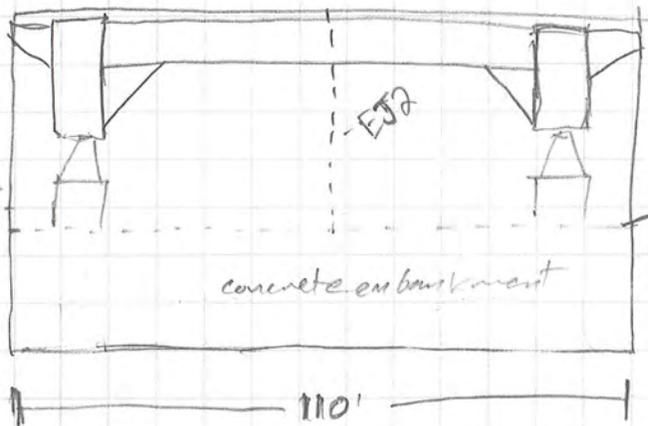
PROJECT NO. \_\_\_\_\_

DATE 4-11-16

BY CG/HH

CHK'D \_\_\_\_\_

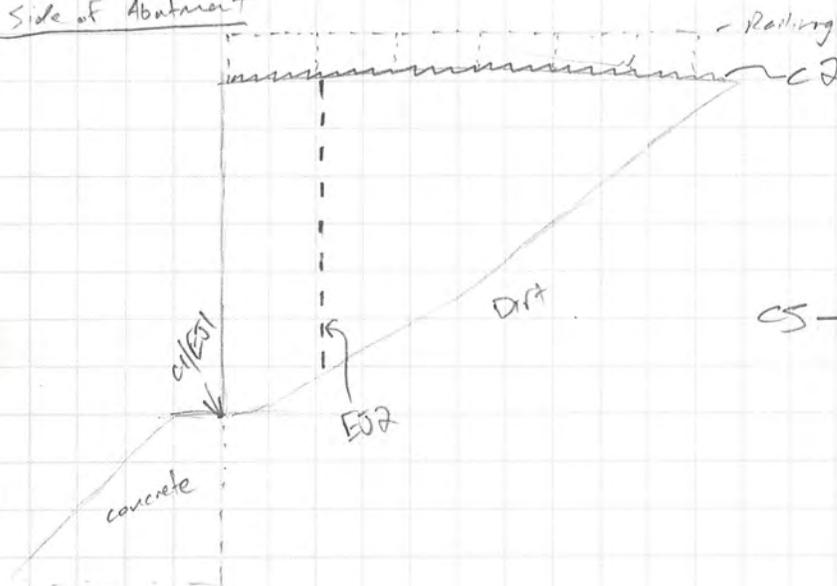
Abutment 95SB (North end)



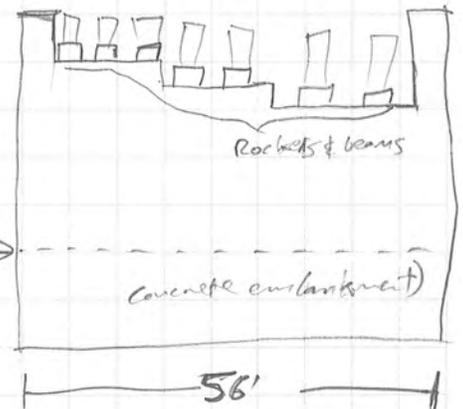
ACM Samples

- C1 - Gray caulk along abutment/embankment
- EJ1 - tar board hard associated w/ C1
- EJ2 - black tar board
- C2 - gray caulk along sidewalk & abutment
- C3 - off white hard caulk
- C4 - tan caulk on sign #21216 support/base
- RT1 - Road tar on Asphaltic plugs
- C5 - black tar along abutment

Side of Abutment



Abutment 95 SB (South end)



Notes: Railing & Fence unpainted w/ rubber pads on railing supports

C2 along abutment on top (not on bridge)

C3 is every 16' in between concrete wall along sidewalk & divider (a lot has fallen off sporadic)

C3 also on base of street lights

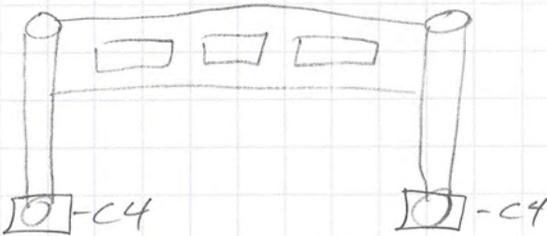


CTDOT  
SUBJECT Goldstar Bridge SB Signs

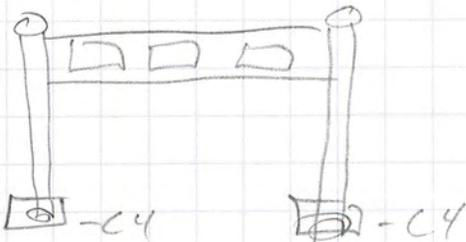
Sign 21216



Sign 21217



Sign 21218

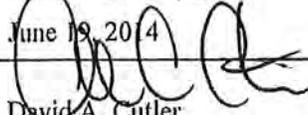


STATE OF CONNECTICUT  
DEPARTMENT OF TRANSPORTATION

*memorandum*

**subject:** Hazardous Contaminated Materials Screening  
State Project No. 94-252  
Bridge Nos. 02514A and 02514B  
I-95 SB over Thames River and Local Roads  
Groton / New London

**date:** June 19, 2014

**from:**   
David A. Cutler  
Transportation Supervising Engineer  
Bureau of Engineering and Construction

**to:**

Mr. Gregory M. Dorosh  
Transportation Principal Engineer  
Bureau of Engineering and Construction

Hazardous/Contaminated Materials Screening

This project consists of the following repairs for Bridge No. 02514A: ~~SB~~ SB (over River)

- Replace existing bituminous overlay and waterproofing membrane
- Partial/full depth patches in the reinforced concrete deck and repair underside of deck concrete
- Install deck weep pipe extensions, clean scuppers and repair bridge drainage system
- Replace compression seals at the sidewalk deck joints
- Replace asphaltic plug deck joints and strip seal expansion deck joints
- Repair the modular deck joints and replace modular deck joint seal glands
- Repair metal bridge rail and concrete sidewalk on the bridge
- Localized paint removal and field painting of superstructure steel at areas of section losses
- Repair defective welds and repair steel superstructure
- Patch substructure concrete and patch stone masonry
- Clean and lubricate existing frozen bearings
- Remove wide concrete beam haunches within limits of the roadways below the bridge

This project consists of the following repairs for Bridge No. 02514B: SB (off Ramp)

- Replace existing bituminous overlay and waterproofing membrane
- Partial/full depth patches in the reinforced concrete deck
- Replace compression seals at the sidewalk deck joints
- Replace asphaltic plug deck joints
- Repair bridge rail, chain link fence, picket fence, and concrete sidewalk on the bridge
- Replace existing steel sliding plate bearings with elastomeric bearings
- Localized paint removal and field painting of superstructure steel
- Patch substructure concrete
- Repair defective welds
- Clean existing scuppers
- Stabilize approach roadway embankment and repair damaged guardrail
- Remove wide concrete beam haunches within limits of the roadway below the bridge

No excavation is anticipated for the rehabilitation of Bridge No. 02514A. Minor excavation is anticipated to stabilize the approach roadway embankment of Bridge No. 02514B.

Additional information is attached for your use in generating the screening evaluation for the subject bridge:

- Location Map
- Limits of Work

Please provide this office with the results of the screening evaluation for use in developing and advancing this project.

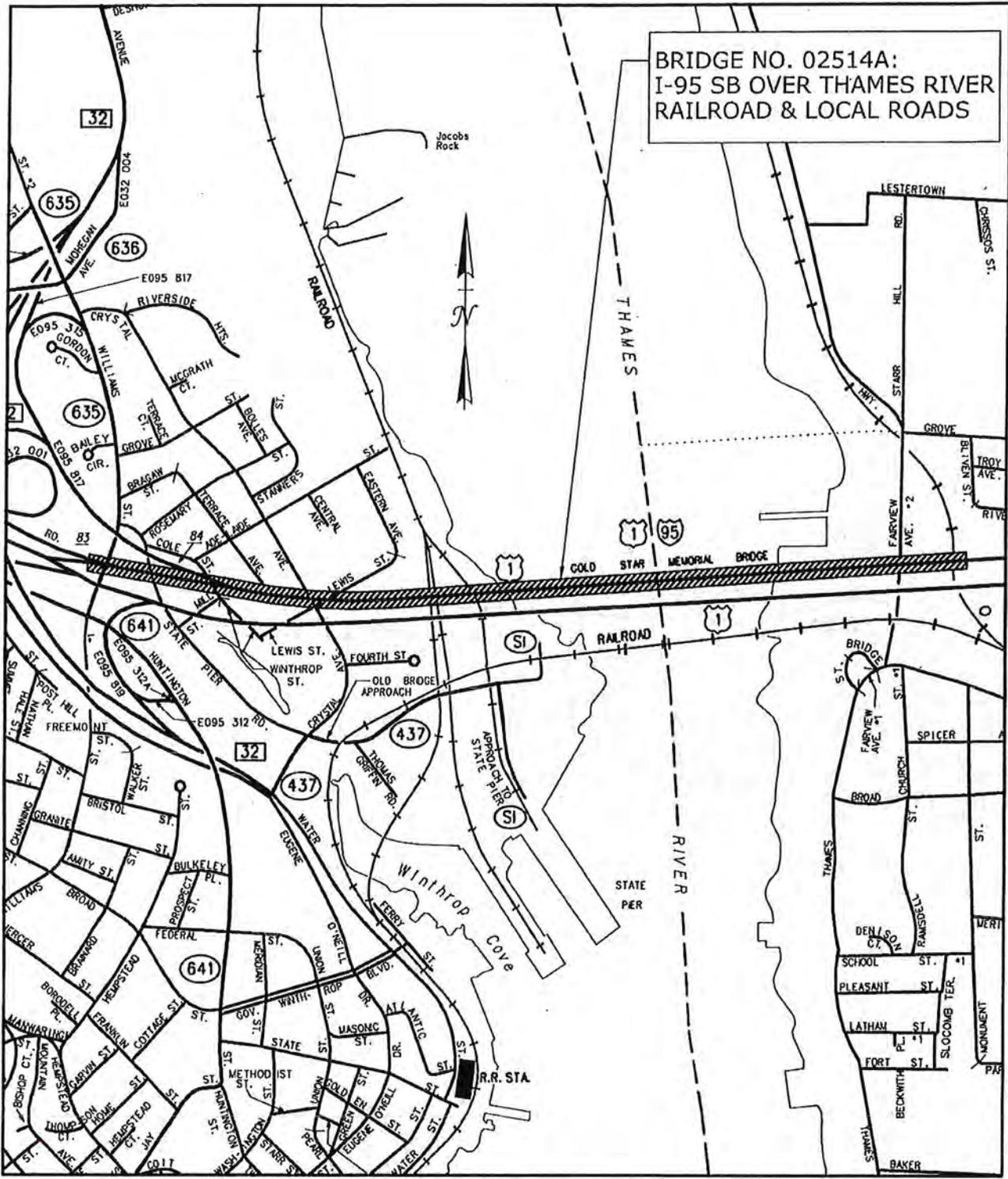
A reply by July 19, 2014 would be appreciated. Time expended for the completion of these activities should be charged to Project No. 170-3064. If you have any questions or require additional information, please contact Mr. Andrew J. Cardinali, Transportation Engineer III, at Ext. 3315.

Attachments

Ricky Mears / rdm

cc: Timothy D. Fields – David A. Cutler – Andrew J. Cardinali  
Jacob J. Argiro – Donald P. Wurst (CME)

**BRIDGE NO. 02514A:  
I-95 SB OVER THAMES RIVER  
RAILROAD & LOCAL ROADS**



SCALE IN FEET



STATE PROJECT NO.:  
94-252  
CITY/TOWN:  
NEW LONDON/GROTON



**BRIDGE NO. 02514A  
LOCATION MAP**



DATE:  
6/6/2014  
SHEET NO.:  
1 OF 1



# CONNECTICUT DEPARTMENT OF TRANSPORTATION

STATE PROJECT NO. 170-3014  
STATEWIDE OVERHEAD SIGN STRUCTURE INSPECTION

## INSPECTION REPORT

Date of Inspection: September 26, 2011

<b>Sign Structure No.</b>	<b>21216</b>
<b>Structure Type:</b>	<b>42 OTS</b>
<b>Town:</b>	<b>Groton</b>
<b>Route &amp; Direction:</b>	<b>I-95 SB</b>
<b>Mile Point:</b>	<b>94.41</b>
<b>KM Point:</b>	<b>151.94</b>



SCAN  
7-7-12  
LA

<u>Contents</u>	<u># of Pages</u>
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Executive Summary	2
BRI 49	1
BRI 48	2
Clearance Diagram	1
Field Notes/Sketches	5
Photographs	4
Structural Analysis	On File (1996)
Ultrasonic Report	-
Back-up Field Notes	3
Sign Structure Plans	On File (1996) 3 pgs

FEB 03 2012

P.E. Reviewer/Date: *[Signature]* 2/1/12

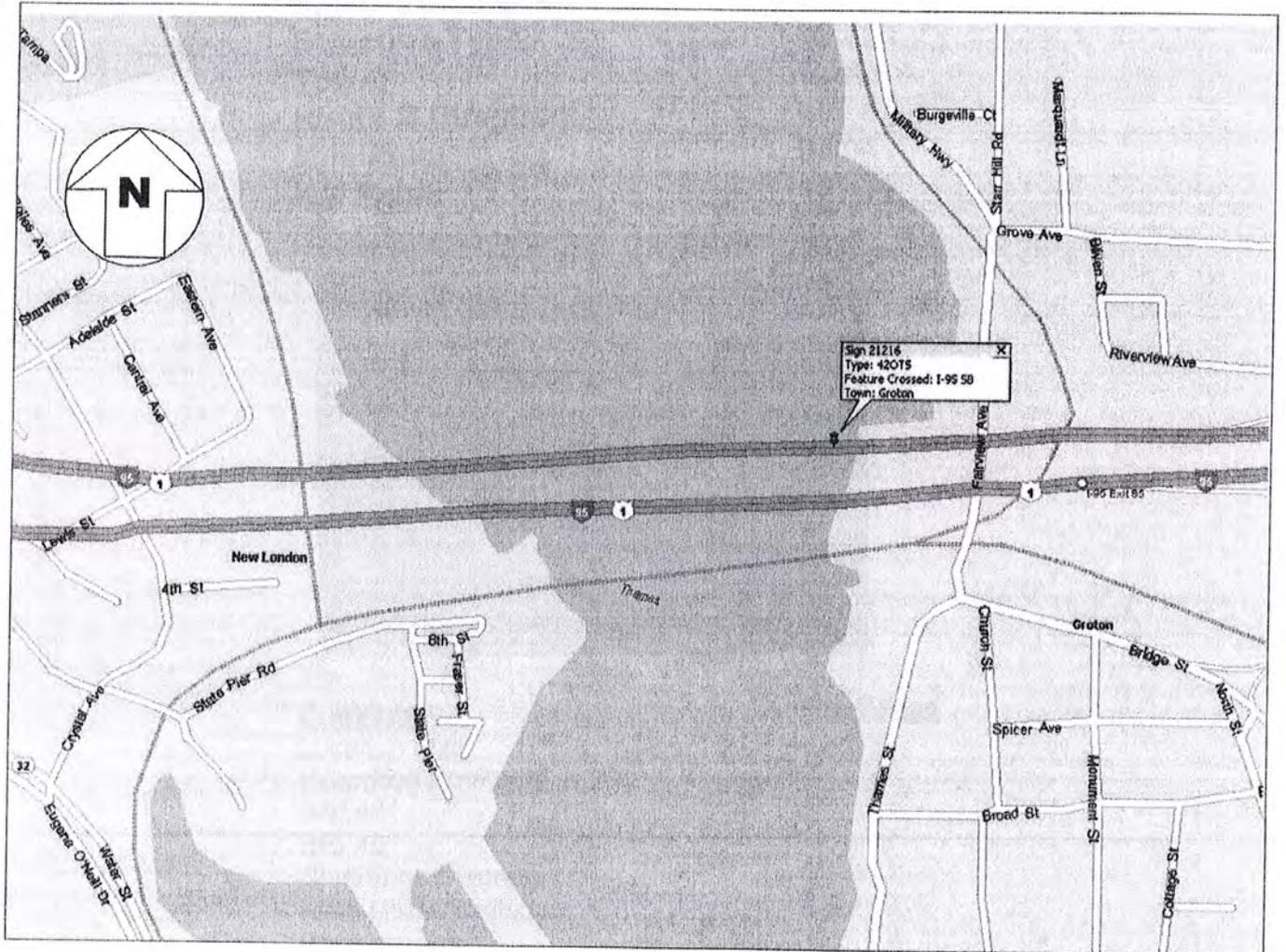
Pennoni Reviewer/Date: *[Signature]* 1-24-12



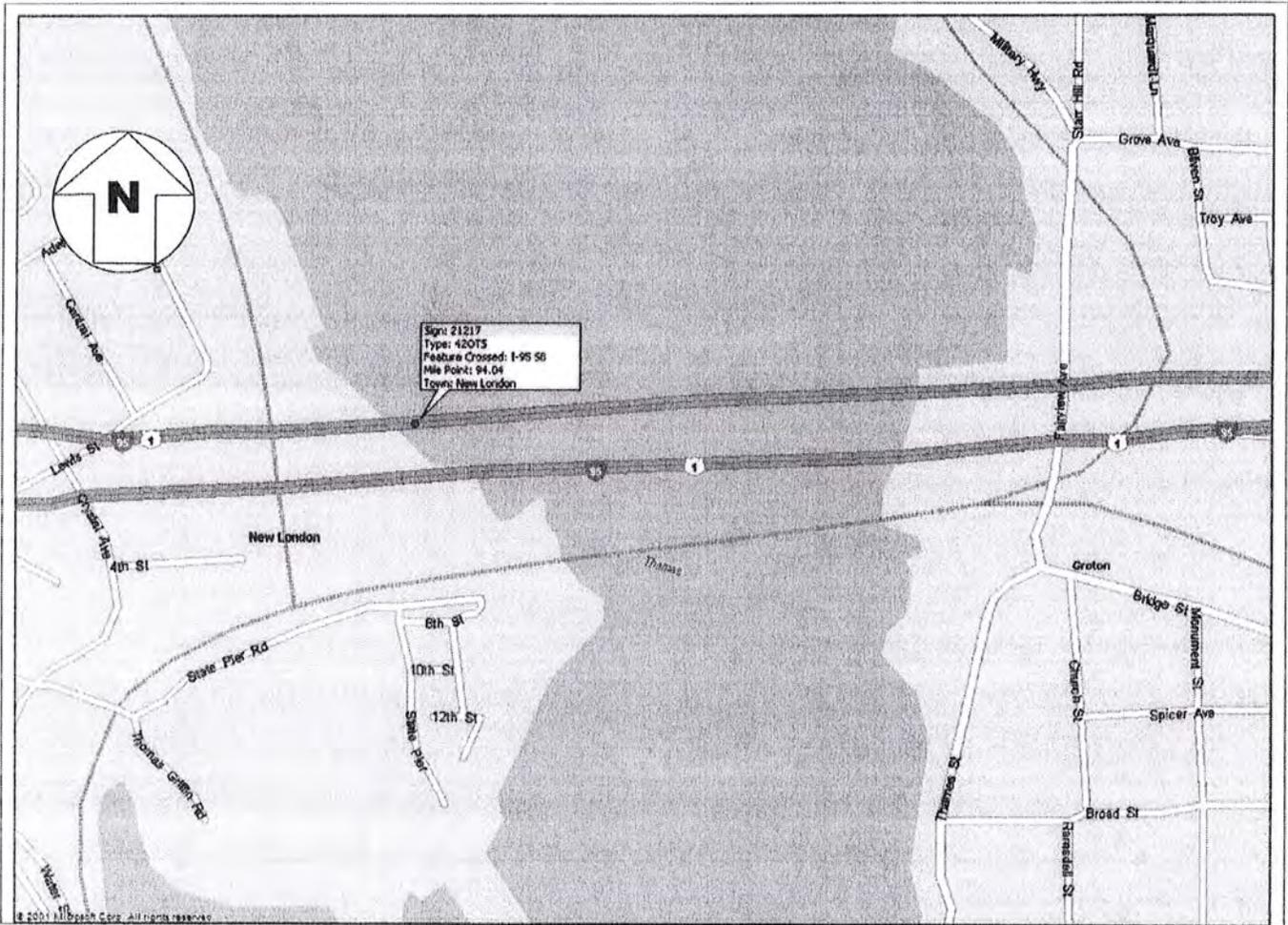
Prepared By:

Prepared for:

### LOCATION MAP



### LOCATION MAP



# CONNECTICUT DEPARTMENT OF TRANSPORTATION

STATE PROJECT NO. 170-3014  
STATEWIDE OVERHEAD SIGN STRUCTURE INSPECTION

## INSPECTION REPORT

Date of Inspection: September 28, 2011

<b>Sign Structure No.</b>	<b>21218</b>
<b>Structure Type:</b>	<b>42OTS</b>
<b>Town:</b>	<b>New London</b>
<b>Route &amp; Direction:</b>	<b>I-95 SB</b>
<b>Mile Point:</b>	<b>93.64</b>
<b>KM Point:</b>	<b>150.70</b>



MAR 05 2012

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Structural Analysis	On File (2000)
Ultrasonic Report	-
Back-up Field Notes	3
Sign Structure Plans	4

scan  
7-7-12  
LD

P.E. Reviewer/Date: *[Signature]* 2/27/12

Penmoni Reviewer/Date: *[Signature]*



FOR SEAN A. PATRICK  
Prepared for:

Prepared By:

### LOCATION MAP

