June 15, 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 Nos. 03912 & 03913, Route 71, New Britain, CT
ConnDOT Assignment No. 514-5273
ConnDOT Project No. 88-187
TRC Project No. 222165.5273.00710

Dear Mr. Bonsignore:

TRC performed a limited survey for hazardous building materials associated with the planned rehabilitation of Bridge Nos. 03912 and 03913, Route 71 in New Britain, Connecticut. Results of the survey identified no lead based paint (LBP) to be present on the metal structural steel/metal bridge components (unpainted – rust) of Bridge Nos. 03912 and 03913. At Bridge No. 03912, there was also no LBP identified on the concrete abutments (0.0 mg/cm^2 / ND<0.10% by weight), therefore any paint waste generated would be considered non-RCRA, non-hazardous waste. At Bridge No. 03912, suspect asbestos containing materials in the form of sidewalk tar caulk, grey caulking at sidewalk, grey caulking at expansion joints and brown caulking at parapet wall/sidewalk were sampled and found to be NON asbestos-containing materials (ACM). At Bridge No. 03913, suspect asbestos containing materials in the form of tar expansion joints, grey caulking at sidewalk curb, and dark grey caulking between sidewalk sections were sampled and also found to be NON-ACM. No pigeon guano accumulations were identified in accessible areas of the two bridges. There were however mercury containing high pressure sodium light fixtures identified beneath Bridge No. 03912, but they are not projected to be impacted by the renovation project. Associated laboratory data, 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

Lead Based Paint Measurement Summary Table

Device(s):	Niton XLP301-A (Serial 24792 & 25555) X Ray Fluorescence (XRF) Spectrum Analyzer
Site:	Bridge Nos. 03912 & 03913, New Britain, CT
Project # :	222165.5273.00710
Date(s):	9/17/2015 & 9/28/15
Inspector:	Bryce Aston (Lead Inspector/RA #001838) & Chris Gaines (Lead Inspector/RA #002219)

Number	Interior/ Exterior	Location	Bridge #	Structure	Feature	Material	Color	Condition	Reading (mg/cm2)	Precision (mg/cm2)	Depth Index	Duration (sec)	Date/Time
1			**Self Calibration**									216.7	2/6/2016 11:29
2			**0.0 Calibration**						0.0	0.0	1.0	1.5	2/6/2016 11:29
3			**1.6 Calibration**						1.5	0.1	1.1	7.3	2/6/2016 11:30
4			**0.7 Calibration**						0.8	0.1	1.1	9.9	2/6/2016 11:31
5	Exterior	New Britain	Bridge No. 03912	Girder		Metal	Unpainted	Rust	0.0	0.0	1.0	2.6	2/6/2016 11:39
6	Exterior	New Britain	Bridge No. 03912	Girder		Metal	Unpainted	Rust	0.0	0.0	1.0	2.8	2/6/2016 11:40
7	Exterior	New Britain	Bridge No. 03912	Bearing		Metal	Unpainted	Rust	0.0	0.0	1.0	2.6	2/6/2016 11:40
8	Exterior	New Britain	Bridge No. 03912	Bearing		Metal	Unpainted	Rust	0.0	0.0	1.0	2.9	2/6/2016 11:41
9	Exterior	New Britain	Bridge No. 03912	Crossbeam		Metal	Unpainted	Rust	0.0	0.0	1.3	2.6	2/6/2016 11:41
10	Exterior	New Britain	Bridge No. 03912	Crossbeam		Metal	Unpainted	Rust	0.0	0.0	1.0	2.8	2/6/2016 11:41
11	Exterior	New Britain	Bridge No. 03912	Crossbeam		Metal	Unpainted	Rust	0.0	0.0	1.0	2.6	2/6/2016 11:42
12	Exterior	New Britain	Bridge No. 03912	Wall		Concrete	Tan/Beige	Intact	0.0	0.0	1.0	4.6	2/6/2016 12:07
13	Exterior	New Britain	Bridge No. 03912	Wall		Concrete	Tan/Beige	Intact	0.0	0.0	1.1	4.8	2/6/2016 12:07
14			**0.0 Calibration**						0.0	0.0	2.0	2.4	2/6/2016 12:25
15			**1.6 Calibration**						1.5	0.1	1.1	7.9	2/6/2016 12:26
16			**0.7 Calibration**						0.7	0.1	1.0	4.2	2/6/2016 12:26
17			**Self Calibration**									82.2	2/22/2016 10:50
18			**0.7 Calibration**						0.7	0.1	1.1	10.4	2/22/2016 10:55
19			**1.6 Calibration**						1.6	0.1	1.2	10.7	2/22/2016 10:55
20			**3.5 Calibration**						3.2	0.1	1.2	17.1	2/22/2016 10:56
21	Exterior	New Britain	Bridge No. 03913	Girder		Metal	Unpainted	Rust	0.0	0.0	1.0	3.4	2/22/2016 11:09
22	Exterior	New Britain	Bridge No. 03913	Girder		Metal	Unpainted	Rust	0.0	0.0	1.0	3.7	2/22/2016 11:09
23	Exterior	New Britain	Bridge No. 03913	Girder		Metal	Unpainted	Rust	0.0	0.0	1.1	3.7	2/22/2016 11:10
24	Exterior	New Britain	Bridge No. 03913	Girder	Crossbeam	Metal	Unpainted	Rust	0.0	0.0	5.1	3.0	2/22/2016 11:10
25	Exterior	New Britain	Bridge No. 03913	Girder	Crossbeam	Metal	Unpainted	Rust	0.0	0.0	2.3	4.4	2/22/2016 11:10
26	Exterior	New Britain	Bridge No. 03913	Girder	Bearing	Metal	Unpainted	Rust	0.0	0.0	3.9	5.7	2/22/2016 11:11
27	Exterior	New Britain	Bridge No. 03913	Girder	Bearing	Metal	Unpainted	Rust	0.0	0.0	1.0	4.4	2/22/2016 11:11
28			**0.7 Calibration**						0.6	0.1	1.0	10.4	2/22/2016 12:11
29			**1.6 Calibration**						1.5	0.1	1.1	10.7	2/22/2016 12:11
30			**3.5 Calibration**						3.4	0.2	1.3	10.4	2/22/2016 12:12

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# 6020151

Report Date:February 11, 2016
Project: CTDOT
Project Number: Bridge 03912, 222165-~~5271~~ 5273-0710

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 14.1°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
1	6020151-01	Paint Chip	2/05/2016 10:25	02/09/2016

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
6020151-01	1	ND	0.10	%	1	B6B1126	02/11/2016	02/11/2016 15:37	

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 # : 6020151
Project: CTDOT
Project Number: Bridge 03912, 222165-5271-0710

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
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

6020151

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
222165-5271-0710	Ct Dot bridge 03912		24hr / 48hr / 3day / 5day
INSPECTOR: (SIGNATURE)	(PRINTED) Bryce aston		24hr x 48hr / 3day / 5day

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
1	2/5/16	1025		X	Bridge abutment concrete						x	Concrete Abutment paint
2	2/5/16	1026		X	Bridge abutment concrete				X			Concrete abutment paint

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	2/8/16	14.1 1300 2/9/16			
(Printed) Bryce Aston	Time: 1100	(Printed)	(Printed)	Time:	(Printed)

Results to Eplimpton@trcsolutions.com and Sarienti@trcsolutions.com
*****If sample # 1 has detectable pb, then proceed to sample #2. *******

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 #. 47512

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
222165.5273.0710	CT Dot Bridge 3912 Rt 71 New Britain		PLM: 8hr x 24hr 48hr 3day TEM: 24hr x 48hr 3day 5day
SIGNATURE: Bryce	INSPECTOR: Bryce Aston		

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	2/5/16	1103		X	Top of bridge sidewalk caulk	x					Grey caulk c1
2	2/5/16	1102		X	Top of bridge sidewalk caulk	X				x	Grey caulk c1
3	2/5/16	1120		X	Top of bridge sidewalk tar caulk	X					Black tar caulk c2
4	2/5/16	1125		X	Top of bridge sidewalk tar caulk	X				x	Black tar caulk c2
5	2/5/16	1200		X	Top of bridge exp joint caulk	X					Grey Caulk c3
6	2/5/16	1150		X	Top of Bridge exp joint caulk	X				x	Grey caulk c3
7	2/5/16	1235		X	Top of bridge wall/sidewalk caulk	X					Brown caulk c4
8	2/5/16	1230		X	Top of bridge wall/sidewalk caulk	X				x	Brown caulk c4

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	2/8/16	2/8/16			
(Printed) Bryce Aston	Time: 1040	(Printed) 1100 Williamson	(Printed)	Time:	(Printed)

Remarks: Results to Erik Plimpton and Steve Arienti

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 #: 0047512 5273
Project #: 222165.~~5271~~.0710
Date Received: 02/08/2016
Date Analyzed: 02/08/2016

Site: Bridge 3912, Rt. 71, New Britain, 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	Grey	Yes	No	--	---	ND	None
2	Grey	Yes	No	--	---	ND	None
3	Black	Yes	No	--	---	ND	None
4	Black	Yes	No	--	---	ND	None
5	Grey	Yes	No	--	---	ND	None
6	Grey	Yes	No	--	---	ND	None
7	Brown	Yes	No	--	---	ND	None
8	Brown	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), 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 — Kathleen Williamson, Laboratory Manager

Reviewed by: Amanda Parkins — Amanda Parkins, Approved Signatory

Date Issued 02/08/2016

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, MA 01801 Ph. 781-935-3212 Fax 781-932-4857

TEM Bulk Chain of Custody Record

NT 15606

Date: 02/09/16

PO#: **C222165**

Analysis Type: Chatfield **EPA N.O.B** Qualitative

Client: TRC

Client Job#: 222165.~~5271~~ 5273.0710

Client Job Ref./Loc.: CT DOT- Bridge 3912, Rt. 71, New Britain, CT

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

Received by: Michelle Wentling 10am 2.10.16

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

Samplers Name: B. Aston

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	47512	Caulk	See COC		
4	47512	Caulk			
6	47512	Caulk			
8	47512	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 #: 222165.5271.0710
Client Reference: CT DOT - Bridge 3912, Tr. 71, New Britain, CT
PO #: C222165
Client #: 297
Client Name: TRC Environmental Corp. (CT)

Batch: **NT 15606**
Method: NOB
Date Received: 2/10/2016
Date Analyzed: 2/12/2016
Date of Report: 2/12/2016

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						
NT119064	2	Grey caulk		.0611	.00	.00	.00	.00	.00	.00	27.17	32.90	39.93	ND	Yes	No
NT119065	4	Black tar caulk		.7586	.22	.00	.00	.00	.00	.00	10.99	55.29	33.72	TR	Yes	No
NT119066	6	Grey caulk		.2857	.00	.00	.00	.00	.00	.00	30.48	33.43	36.09	ND	Yes	No
NT119067	8	Brown caulk		.2349	.00	.00	.00	.00	.00	.00	54.75	25.50	19.75	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

TRC

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

Edition: October 2009
Supersede Previous Edition

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

LAB ID #. 47580

PROJECT NUMBER	PROJECT NAME
222165.5223.0710	CTDOT - Bridge #03913 New Britain, CT

SIGNATURE	INSPECTOR
Chris G	Chris Gomes

TURNAROUND TIME

PLM:		8hr		24hr	X	48hr		3day
TEM:		24hr		48hr		3day		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
01	2-22-16	1030			Topside of bridge in between sidewalk & curb	X					C1 - gray caulk
02		1040				X				X	
03		1045			In between sidewalk sections	X					C2 - dark gray caulk
04		1047				X				X	
05		1100			expansion joint in between bridge & road	X					T1 - Tar expansion joint
06		1103				X				X	

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
Chris G	2-22-16	2/23/16			
(Printed) Chris Gomes	Time: 1800	(Printed) 0900 Williamson	(Printed)	Time:	(Printed)

Remarks:

Condition of Samples:
Acceptable: Yes ✓ No
Comments:

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

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BULK ASBESTOS ANALYSIS REPORT

CLIENT: CT Department of Transportation

Lab Log #: 0047580
Project #: 222165.5273.0710
Date Received: 02/23/2016
Date Analyzed: 02/23/2016

Site: Bridge #03913, New Britain, CT

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	Dark Grey	Yes	No	- -	- - -	ND	None
04	Dark Grey	Yes	No	- -	- - -	ND	None
05	Black	Yes	No	- -	- - -	ND	None
06	Black	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), 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
Kathleen Williamson, Laboratory Manager

Reviewed by: Margaret Flanagan
Margaret Flanagan, Approved Signatory

Date Issued
02/23/2016

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.

NT15628

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

TEM Bulk Chain of Custody Record

Date: 02/24/16

PO#: **C222165**

Analysis Type: Chatfield **EPA N.O.B** Qualitative

Client: TRC

Client Job#: 222165.5273.0710

Client Job Ref./Loc.: CT DOT- Bridge #03913

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

Received by: Margaret Valentin 2/25/16 955am

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

Samplers Name: C. Gaines

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**
02	47580	Caulk	See COC		
04	47580	Caulk			
06	47580	Expansion Joint			

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 #: 222165.5273.0710
Client Reference: CT DOT - Bridge #03913
PO #: C222165
Client #: 297
Client Name: TRC Environmental Corp. (CT)

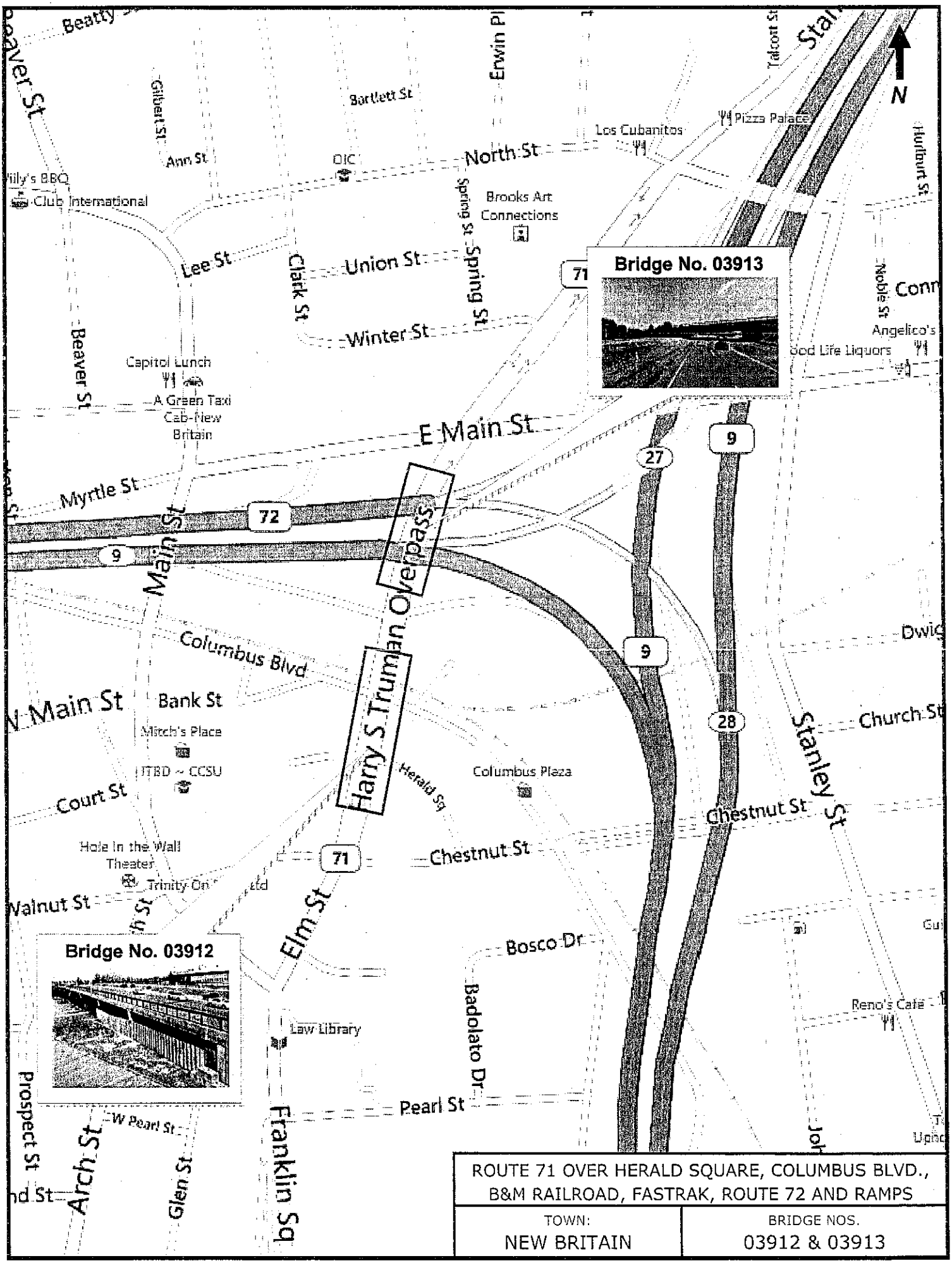
Batch: **NT 15628**
Method: NOB
Date Received: 2/25/2016
Date Analyzed: 2/29/2016
Date of Report: 2/29/2016

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						
NT119149	02	Grey Caulk		1.2309	.00	.00	.00	.00	.00	.00	30.08	48.48	21.44	ND	Yes	No
NT119150	04	Dark grey caulk		1.3834	.00	.00	.00	.00	.00	.00	35.47	45.03	19.50	ND	Yes	No
NT119151	06	Tar expansion joint		.4957	.00	.00	.00	.00	.00	.00	24.49	53.34	22.17	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



ROUTE 71 OVER HERALD SQUARE, COLUMBUS BLVD., B&M RAILROAD, FASTRAK, ROUTE 72 AND RAMPS	
TOWN: NEW BRITAIN	BRIDGE NOS. 03912 & 03913

Project Description – Bridge No. 03912

Bridge No. 03912, built in 1971, carries Route 71 over Herald Square, Columbus Boulevard, CT Fastrak and the Pan Am Railways track in the city of New Britain. This eight span bridge consists of a weathering steel multi-girder system composite with a reinforced concrete deck supported by concrete abutments and piers. The structure has various span lengths, with a maximum span length of 83 feet and an overall length of 631 feet. The curb-to-curb width is 36 feet, which consists of a 12-foot turning lane and two 12-foot travel lanes, for each direction of Route 71 traffic. Each direction of traffic is separated by a 16-foot wide raised concrete median. There are 8-foot wide sidewalks on both sides of the structure. The out-to-out deck width is 106.5 feet. The 2014 Average Daily Traffic (ADT) on the bridge is 13,900 vehicles. The minimum vertical clearances are 14'-8" over Herald Square, 16'-9" over Columbus Boulevard and 18'-8" over the Pan Am Railways track.

The existing bridge is structurally deficient due to the poor condition of the superstructure steel and is functionally obsolete due to the curb-to-curb width and the minimum vertical clearances over Herald Square and the railroad.

The proposed rehabilitation for Bridge No. 03912 is as follows:

- Repair superstructure steel
- Clean and paint beam ends and bearing devices
- Clean and cold galvanize all anchor bolts
- Remove concrete haunches over travelways
- Repair substructure
- Reconstruct top of pier caps with a sloped top
- Seal longitudinal joint in median
- Replace sidewalk joints; perform approach sidewalk work

The proposed work to the sidewalks and median will be performed utilizing temporary lane shifts of Route 71 traffic. Temporary lane shifts and closures on Herald Square and Columbus Boulevard will be required for substructure and superstructure repairs and the removal of the concrete haunches. Coordination with the railroad and CT Fastrak will be required for substructure and superstructure repairs and the removal of the concrete haunches. Construction easements are anticipated for this project.

This bridge rehabilitation is being combined with the rehabilitation of Bridge No. 03913, for which the total estimated construction cost for this project is approximately $6,500,000. Construction is anticipated to begin in spring 2017 and the estimated construction duration is approximately 8 months.

Project Description – Bridge No. 03913

Bridge No. 03913, built in 1971, carries Route 71 over Route 72 and ramps in the city of New Britain. The structure consists of a two span continuous weathering steel multi-girder system composite with a reinforced concrete deck supported by reinforced concrete abutments and pier. Each span is approximately 170 feet in length with a total structure length of 343 feet. The curb-to-curb width varies across the structure and measures 22 feet for southbound direction (2 lanes) and 30 feet for northbound direction (3 lanes) at its narrowest. There is a raised median measuring 16 feet wide at the pier and approximately 4 feet wide at both abutments. The median width was reduced at both ends of the bridge to accommodate a turning lane at each approach intersection. At the north abutment there are two 12-foot travel lanes in the southbound direction and four 12-foot lanes in the northbound direction, including two turning lanes. At the south abutment, there are three 12-foot lanes in the southbound direction, including one turning lane, and three 12-foot lanes in the northbound direction, including one turning lane. There are 8-foot wide sidewalks on both sides of the structure. The out-to-out deck width is 94.5 feet. The 2014 ADT on the bridge is 17,500 vehicles. The minimum vertical clearance over Route 72 is 16 feet. The curb-to-curb width over the bridge renders the structure functionally obsolete.

The existing cross frame members and girders are not adequate for the required LRFR load conditions and the underside of the concrete deck shows approximately 21.7 percent deterioration and site inspection revealed moisture on the underside of the concrete deck.

The proposed rehabilitation for Bridge No. 03913 is as follows:

- Replace cross frame members and retrofit steel girders to meet LRFR design standards
- Perform full and partial depth and surface patches
- Place new membrane waterproofing and bituminous concrete overlay
- Remove concrete haunches over travelways
- Repair substructure

PHOTO 1
Bridge No. 03912 – New Britain

PHOTO 2
Bridge No. 03912 – New Britain (unpainted – rust)

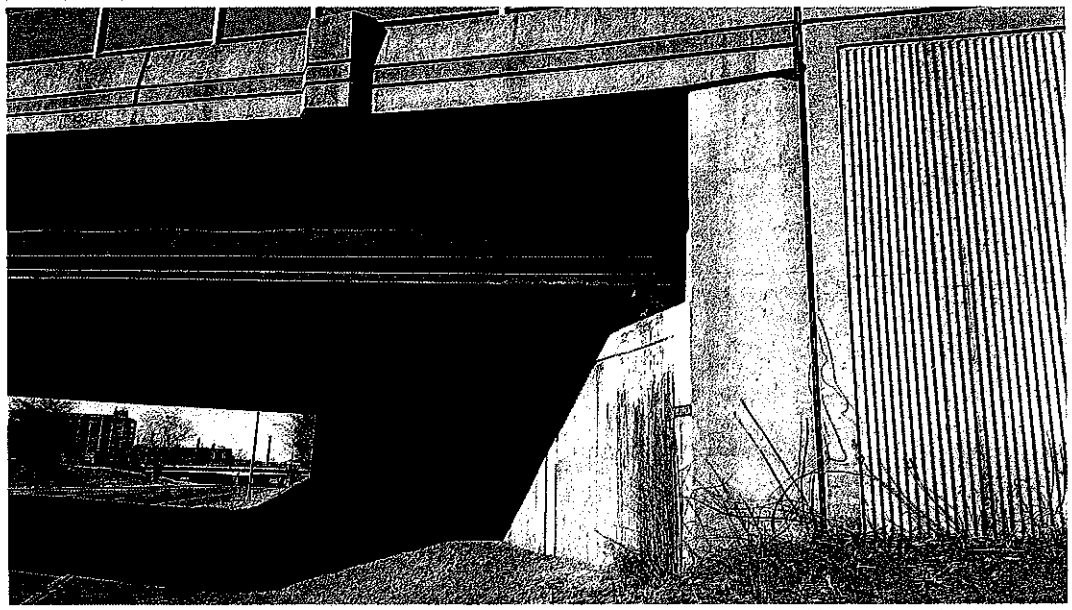


PHOTO 3
Bridge No. 03913 – New Britain

PHOTO 4
Bridge No. 03912 – New Britain (unpainted – rust)

TRC
Results you can rely on

New Britain, CT

SUBJECT Bridge #03912

SHEET NO. _____ OF _____
PROJECT NO. _____
DATE _____
BY _____
CHK'D _____

C1 – Gray caulk under rail footers
C2 – Black seam caulk
C3 – White caulk along wall/sidewalk joint
C4 – Brown seam caulk

HAZWASTE

30 silver bulbs

No GAUNO

☆ I beams not Painted Rust ☆

☆ South end of Bridge is Chain Link fenced Police Evidence / IMPOUNDED (vehicles) ☆

☆ North end is painted concrete near bus Route. ☆

☆☆ Bridge I-beams / components NOT painted RUST ☆☆

☆ Top of ~~[illegible]~~ Concrete only ☆

Pics downloaded to

A

SHEET NO. _____ OF _____

PROJECT NO. _____

DATE 2-22-16

BY CG / DR / MS

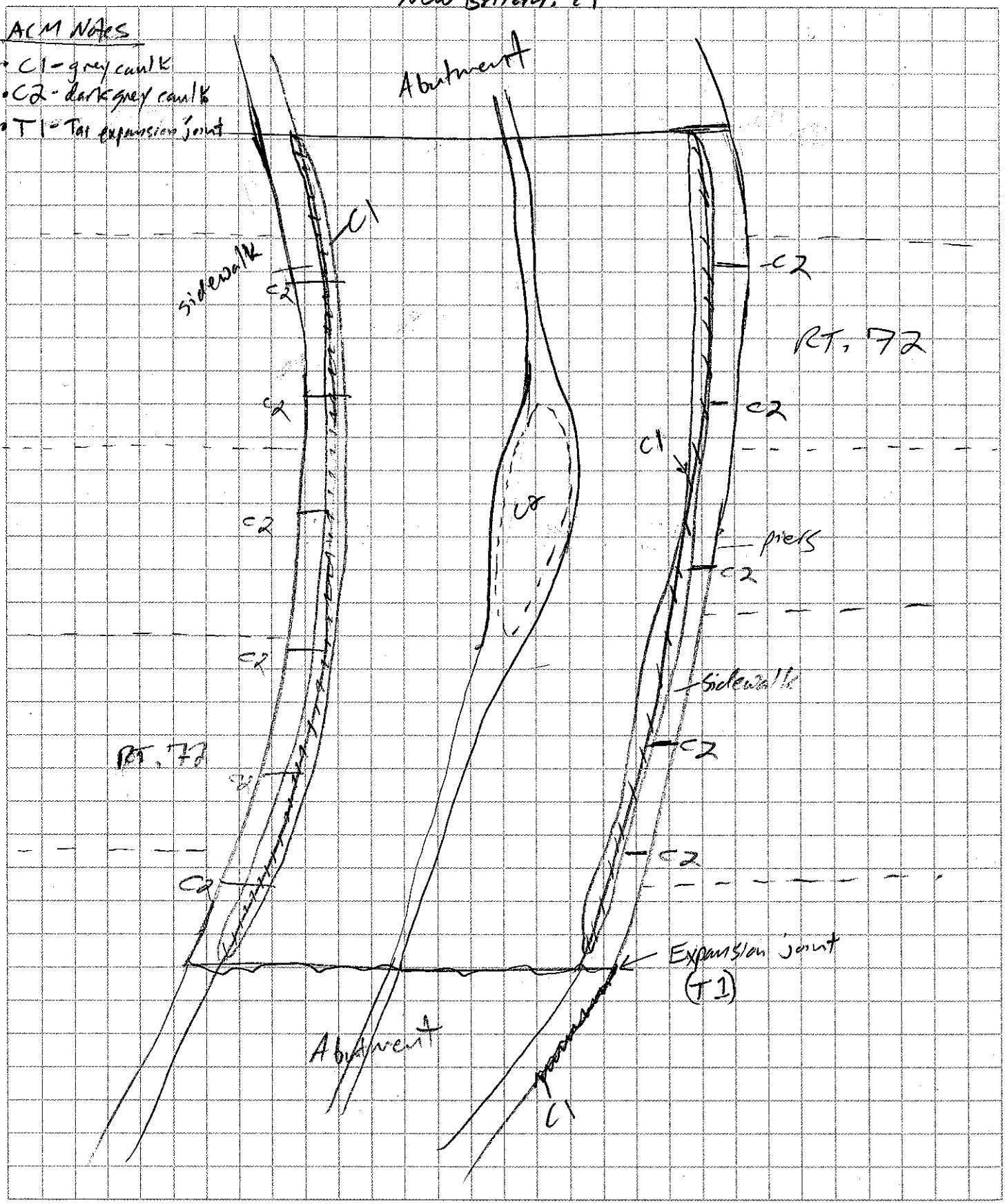
CHK'D _____

TRC Results you can rely on

SUBJECT CTDOT - Bridge # 03913
New Britain, CT

ACM Notes

- C1 - grey caulk
- C2 - dark grey caulk
- T1 - Tai expansion joint



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SHEET NO. _____ OF _____

PROJECT NO. _____

DATE _____

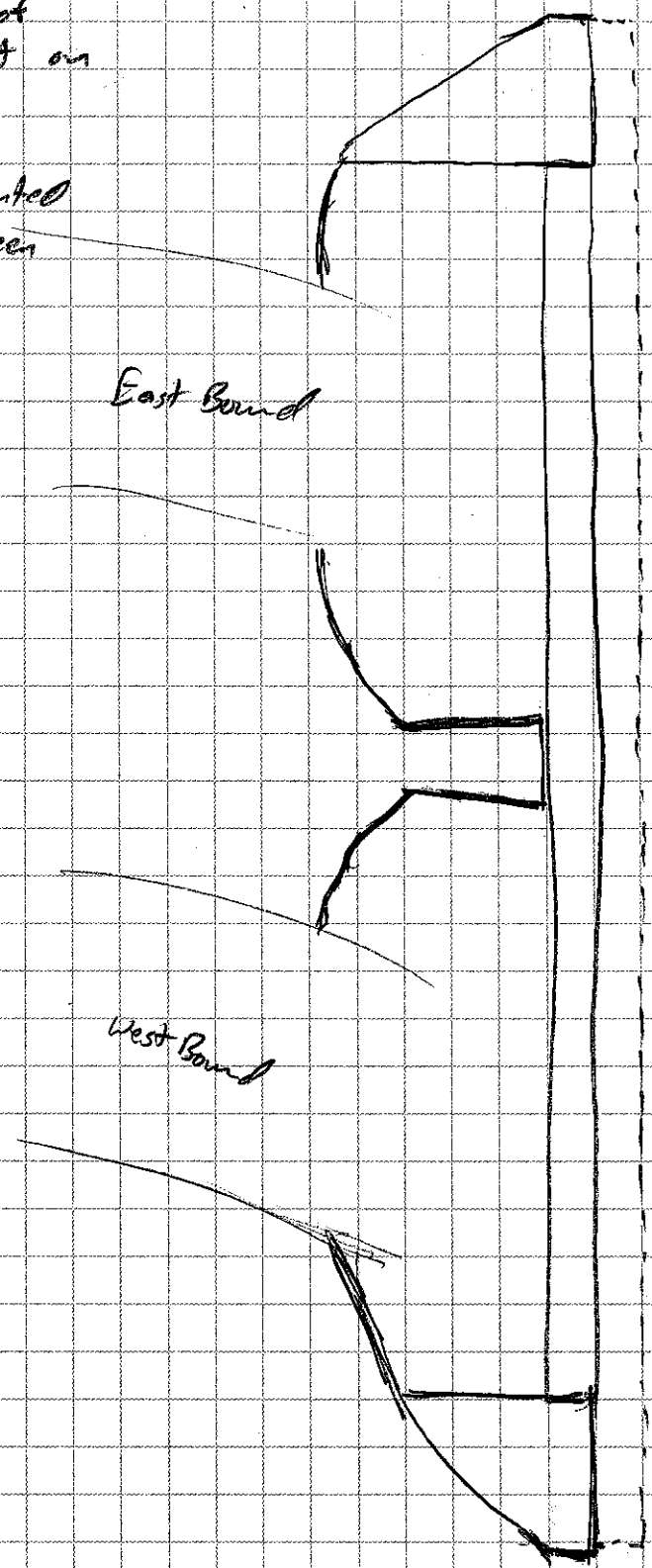
BY CG/DR/MS

CHK'D _____

TRC Results you can rely on

SUBJECT CTDOT - Bridge 03913
New Britain, CT

Notes: 10 beams underside of bridge w/ No paint on beams of bearings.
- Rusted
- Abutments not painted
- 1 set of piers inbetween NB/SB lanes



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