



June 21, 2017

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

Attention: Judith Nemecek, P.E. / Michael Bedson, EIT

Subject: On-Call Asbestos, Lead, Air Quality & Demolition Compliance
Agreement No. 04.27-01(15)
HazMat Inspection - Bridge No. 00772, West Rocks Road over Route 15, Norwalk, CT
ConnDOT Assignment No. 514-5541
ConnDOT Project No. 102-356
TRC Project No. 222165.5541.0710

Dear Mr. Fox:

TRC performed a limited survey for hazardous building materials associated with the replacement of Bridge No. 00772, West Rocks Road over Route 15 in Norwalk, Connecticut. Results of the survey identified lead paint to be present on the structural steel/metal/railing bridge components of Bridge No. 00772. No detectable amounts of lead in paint were identified on the concrete walls/abutments. Results obtained from TCLP waste stream sampling and analysis for leachable lead from the paint on the structural steel/metal bridge/railing components characterized the paint waste stream at Bridge No. 00772 as CTDEEP/RCRA hazardous waste. Since there were no detectable amounts of lead in paint identified on the concrete walls/abutments, any paint waste stream generated would be non-hazardous, non-RCRA lead waste. At Bridge No. 00772, grey rubbery expansion joint caulking on the abutments, turrets and beneath deck were sampled and found to contain no detectable amounts of asbestos. No bird/pigeon guano accumulations were observed in accessible areas of the bridge. Associated laboratory data, inspector notes, project description and site map 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 "Stephen R. Arienti".

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

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

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



Lead Based Paint Measurement Summary Table

Device(s): Niton XLP301-A (Serial #25555) X Ray Fluorescence (XRF) Spectrum Analyzer
 Site: Bridge No. 00722, Norwalk, CT
 Project # : 222165.5541.0710
 Date(s): 6/13/2017
 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									170.1	6/13/2017 9:51
2			0.0 Calibration						0.0	0.0	1.0	1.5	6/13/2017 9:54
3			0.3 Calibration						0.3	0.0	1.0	9.4	6/13/2017 9:55
4			1.6 Calibration						1.5	0.1	1.1	5.2	6/13/2017 9:55
5	Exterior	South	Bridge 722 Norwalk	Wall		Concrete	Tan/Beige	Defective	0.0	0.0	1.0	1.3	6/13/2017 10:50
6	Exterior	South	Bridge 722 Norwalk	Wall		Concrete	Tan/Beige	Defective	0.0	0.0	1.0	3.9	6/13/2017 10:50
7	Exterior	South	Bridge 722 Norwalk	Abutment		Concrete	Tan/Beige	Defective	0.0	0.0	1.0	3.5	6/13/2017 10:51
8	Exterior	South	Bridge 722 Norwalk	Abutment		Concrete	Tan/Beige	Defective	0.0	0.0	1.1	4.2	6/13/2017 10:52
9	Exterior	South	Bridge 722 Norwalk	Abutment		Concrete	Tan/Beige	Defective	0.0	0.0	1.0	6.2	6/13/2017 10:53
10	Exterior	North	Bridge 722 Norwalk	Abutment		Concrete	Tan/Beige	Defective	0.0	0.0	1.1	3.7	6/13/2017 10:54
11	Exterior	North	Bridge 722 Norwalk	Abutment		Concrete	Tan/Beige	Defective	0.0	0.0	1.5	7.4	6/13/2017 10:54
12	Exterior	North	Bridge 722 Norwalk	Wall		Concrete	Tan/Beige	Defective	0.0	0.0	2.7	9.3	6/13/2017 10:55
13	Exterior	North	Bridge 722 Norwalk	Railing		Metal	Grey	Defective	10.3	6.1	2.0	1.2	6/13/2017 10:57
14	Exterior	North	Bridge 722 Norwalk	Railing		Metal	Grey	Defective	12.8	5.4	1.8	1.7	6/13/2017 10:57
15	Exterior	South	Bridge 722 Norwalk	Railing		Metal	Grey	Defective	11.9	4.5	2.0	2.2	6/13/2017 10:58
16	Exterior	South	Bridge 722 Norwalk	Railing		Metal	Grey	Defective	12.2	4.8	1.9	2.0	6/13/2017 10:58
17			0.0 Calibration						0.0	0.0	1.0	1.8	6/13/2017 13:22
18			0.3 Calibration						0.3	0.1	1.0	5.4	6/13/2017 13:23
19			1.6 Calibration						1.5	0.1	1.1	4.9	6/13/2017 13:23

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



Client: Mr. Jonathan Gentile
TRC Environmental Consultants
21 Griffin Rd., North
Windsor, CT 06095

Analytical Report

CET# 7060464

Report Date: June 21, 2017
Project: CTDOT, Bridge
Project Number: Bridge 772 Norwalk
PO Number: 222165.5541.0710

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



New York NELAP Accreditation: 11982
Rhode Island Certification: 199

CET # : 7060464

Project: CTDOT, Bridge

Project Number: Bridge 772 Norwalk

SAMPLE SUMMARY

The sample(s) were received at 25.0°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
01 Roadway Railing	7060464-01	Paint Chip	6/13/2017 10:50	06/16/2017
02 Bridge Structural I Beams	7060464-02	Paint Chip	6/13/2017 11:01	06/16/2017
03 Bridge Concrete Abutment	7060464-03	Paint Chip	6/13/2017 11:07	06/16/2017

Analyte: Total Lead [EPA 6010C]

Analyst: CD

Prep: EPA 3050B

Matrix: Paint Chip

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
7060464-02	02 Bridge Structural I Beams	23	0.10	%	1	B7F2021	06/20/2017	06/20/2017 16:46	
7060464-03	03 Bridge Concrete Abutment	ND	0.10	%	1	B7F2021	06/20/2017	06/20/2017 16:50	

Analyte: TCLP Lead [EPA 6020A]

Analyst: SS

Prep: EPA 3005A-1311

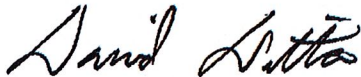
Matrix: Extract

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
7060464-01	01 Roadway Railing	270	0.013	mg/L	1	B7F2010	06/20/2017	06/20/2017 10:36	

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

Sincerely,

This technical report was reviewed by Robert Blake



David Ditta
Laboratory Director



Project Manager

Report Comments:

Sample Result Flags:

- E- The result is estimated, above the calibration range.
- H- The surrogate recovery is above the control limits.
- L- The surrogate recovery is below the control limits.
- B- The compound was detected in the laboratory blank.
- P- The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.
- D- The RPD between the sample and the sample duplicate is high. Sample Homogeneity may be a problem.
- + - The Surrogate was diluted out.
- *C1- The Continuing Calibration did not meet method specifications and was biased low for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased low.
- *C2- The Continuing Calibration did not meet method specifications and was biased high for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased high.
- *F1- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the low side.
- *F2- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the high side.
- I- 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.

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

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

ND is None Detected at or above the specified reporting limit

RL is the Reporting 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 # : 7060464

Project: CTDOT, Bridge

Project Number: Bridge 772 Norwalk

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>EPA 6010C in Solid</i>	
Lead	CT
<i>EPA 6020A in Water</i>	
Lead	NY,CT

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2018
NY	New York Certification (NELAC)	11982	04/01/2018



21 GRIFFIN ROAD NORTH

WINDSOR, CONNECTICUT 06095

TELEPHONE (860) 298-9692

FAX (860) 298-6380



7060464

Edition: November 2013
Supersede Previous Edition

TCLP CHAIN OF CUSTODY

PROJECT NUMBER		PROJECT NAME		PARAMETERS		LAB ID #.							
222165.5541.0710		CT DOT Bridge 722 Norwalk				TURNAROUND TIME							
							24hr	X	48hr		3day		5day
							24hr		48hr		3day		5day
INSPECTOR: (SIGNATURE)			(PRINTED)			MATERIAL							
J. Gentile			J. Gentile/M. Kostruba/E. Gitberg										
FIELD SAMPLE NUMBER	DATE	TIME	TYPE		SAMPLE LOCATION	RCRA Pb	RCRA Pb, AS, CR, CD	8 RCRA Metals	TCLP Pb	SPLP Pb	Total Pb AAS		
			COMP	GRAB									
01	6/13/17	1050		X	Roadway Railing				X				Railing Paint
02	6/13/17	1101		X	Bridge Structural I Beams						X		Silver Paint
03	6/13/17	1107		X	Bridge Concrete Abutment						X		Concrete Paint
04	6/13/17	1115		X	Bridge Concrete Abutment				X				Concrete Paint

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
J. Gentile	6/13/17	Robert Pergamena	J. Gentile	6-16-17	J. Gentile
(Printed)	Time:	(Printed)	(Printed)	Time:	(Printed)
Jonathan Gentile		ROBERT PERGAMENA	ROBERT PERGAMENA	1705	
DO NOT ANALYZE SAMPLE 04 UNLESS SAMPLE 03 HAS DETECTABLE Pb.					Page 1 of 1

TEMP N 25.0



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 #. 50785

PROJECT NUMBER 222165.5541.0710			PROJECT NAME CT DOT Bridge 722 Norwalk, CT			PARAMETERS			TURNAROUND TIME								
									PLM:		8hr		24hr	X	48hr		3day
									TEM:		24hr	X	48hr		3day		5day
SIGNATURE 			INSPECTOR J. Gentile/M. Kostruba						MATERIAL								
FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP GRAB		SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER									
01	6/13/17	1145		X	NW Abutment	X						Grey Rubbery Expansion Jt Caulk (C1)					
02	6/13/17	1145		X	NW Abutment	X				X		Grey Rubbery Expansion Jt Caulk (C1)					

Relinquished by: (Signature) 	Date: 6/13/17	Received by: (Signature) 6/14/17 	Relinquished by: (Signature)	Date:	Received by: (Signature)
(Printed) Jonathan Gentile	Time:	(Printed) 0900 V. Williams	(Printed)	Time:	(Printed)
Remarks:			Condition of Samples: Acceptable: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Comments:		Page 1 of 1



BULK ASBESTOS ANALYSIS REPORT

CLIENT: CT Department of Transportation

Lab Log #: 0050785
Project #: 222165.5541.0710
Date Received: 06/14/2017
Date Analyzed: 06/14/2017

Site: Bridge 722, Norwalk, 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 (expansion caulk)	Yes	No	--	---	ND	None
02	Grey (expansion caulk)	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

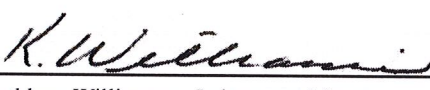
SNA- Sample Not Analyzed- See Chain of Custody for details

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, 2017. TRC is accredited by the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC in the Industrial Hygiene Program (IHLAP) for PLM effective through October 1, 2018. 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:


Kathleen Williamson, Laboratory Manager

Reviewed by:


Cathryn Lemire, Approved Signatory

Date Issued

06/15/2017

TRC LABORATORY ASBESTOS ANALYTICAL ACCREDITATIONS

NVLAP Lab Code 101424-0
RI #AAL-007 TX #300354
CO# AL-15020

AIHA-LAP, LLC #100122 CT #PH-0426
VT #AL014538 LA#05011 VA #3333 000283
PHIL# 461 PA#68-03387

ME LA-0075, LB-0071 MA #AA000052 NY #10980 WV# LT000411
AZ #A20944 HI #L-09-004 NJ #CT004 CA #2907

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 16487

Date: 06/15/17

PO#: C222165

Client: TRC

Client Job#: 222165.5541.0710

Client Job Ref./Loc.: CT DOT- Bridge 722, Norwalk, CT

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

Received by: *Paolo Keen-Hale 6-16-17 9:35*

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

Samplers Name: J. Gentile

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

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	50785	Expansion Caulk	See COC		
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

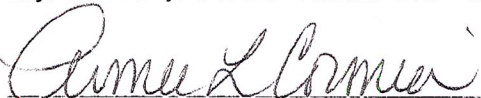
Client Project #: 222165.5541.0710
Client Reference: CT DOT - Bridge 722, Norwalk, CT
PO #: C222165
Client #: 297
Client Name: TRC Environmental Corp. (CT)

Batch: NT 16487
Method: NOB
Date Received: 6/16/2017
Date Analyzed: 6/19/2017
Date of Report: 6/19/2017

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						
NT124250	02	Grey Rubbery Expansion Jt Caulk		.1048	.00	.00	.00	.00	.00	.00	10.21	73.09	16.70	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



SUBJECT Bridge #722 Norwalk

SHEET NO. _____ OF _____

PROJECT NO. 222165.3541.0710

DATE 6/13

BY JG/MK/EG

CHK'D _____

ACM

C₁ = Grey Rubbery EJ Caulk (~64 LF)

C₁ on either side of abutments ~16' high / Location

also on 4 "turrets" (~10 LF ea)

may also go under roadway at each end (~30 LF ea)

- Chain link fence on both sides limiting access to railings
- No access to I-beam Superstructure due to proximity to highway below
- Conc abutments w/c₁
- Lg. amt. of poison ivy on 4 sides limiting access to below
- conc. structure is painted BDL on XRF
- No access to below deck possible VB/tar

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION



memorandum

subject: Environmental Screening Request

Project No. 0102-0356

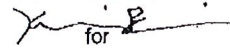
F.A.P. No. – 1102-118

Rehabilitation of Bridge 00722

City of Norwalk

date: July 13, 2016

to: Christopher J. Bonsignore
Transportation Principal Engineer
Bureau of Engineering and Construction

from:  for
Mary E. Baker
Transportation Principal Engineer
Bureau of Engineering and Construction

Project No. 0102-0356 has been previously screened with a response date of April 21, 2015. Bridge Design is requesting a rescreening of the subject project. The scope of work has been changed from a deck replacement to include a superstructure replacement and abutment modifications requiring 10+ feet of excavation.

Please provide an environmental screening for this project and inform this office of any environmental concerns by Tuesday, August 02, 2016.

Attached for your information and use are the following:

- Project Description
- Location Map
- Environmental Screening Response Dated April 21, 2015

The requirement for Rights-of-Way is to be determined.

West Rocks Road Bridge will be closed to vehicular and pedestrian traffic for approximately 12 weeks.

Please contact Sarwat A. Basha, Project Engineer, at (860) 594-3117 should you have any questions or require additional information.

Attachments

Jacob W. Platt/ jwp

cc: Mary E. Baker - Kevin V. Blasi - Sarwat A. Basha

PROJECT NO. 0102-0356
F.A.P. No. 1102-118
REHABILITATION OF BRIDGE NO. 00722
CARRYING WEST ROCKS ROAD OVER ROUTE 15
NORWALK, CONNECTICUT

PROJECT DESCRIPTION

Bridge No. 00722 is single span, 75 feet long, with a 36.1 feet out-to-out deck width and a curb-to-curb roadway width of 27.5 feet. The structure was built in 1938 and was rehabilitated in 1986 including repair of the deck slab, installation of a new overlay, and a concrete sidewalk. It carries West Rocks Road over the Merritt Parkway (Route 15). The bridge carries one lane of traffic in both directions and is located at log mile 1.44 of the Parkway.

The structure has a skew angle of 36 degrees with respect to the West Rocks Road. The estimated 2015 Average Daily Traffic (ADT) is approximately 10,282 vehicles with 5% truck traffic. The superstructure is comprised of three riveted built-up steel frames with frame columns embedded in the concrete abutment. Based on the latest routine inspection performed in November 25, 2015, the bridge received an overall rating of 5 (Fair Condition). The superstructure must be rehabilitated and additional beam members introduced to eliminate overstress to the bridge by current design vehicles.

Proposed Rehabilitation:

- Removal of horizontal portions of steel rigid frames and introduction of steel bents spanning frame legs
- Replacement of removed portions of frame with welded arch plate girders
- Addition of two intermediate rolled beams spaced equally between frame members
- Modification of abutments to accommodate new girder configuration requiring 10+ foot excavation
- New bridge deck
- New sidewalk that approximately matches existing. Curb-to-curb width to remain 27.5 feet
- Reconstructed parapets that retain historic character of existing
- Installation of Two-Tube railing in front of reconstructed parapets
- Construction of approach slabs

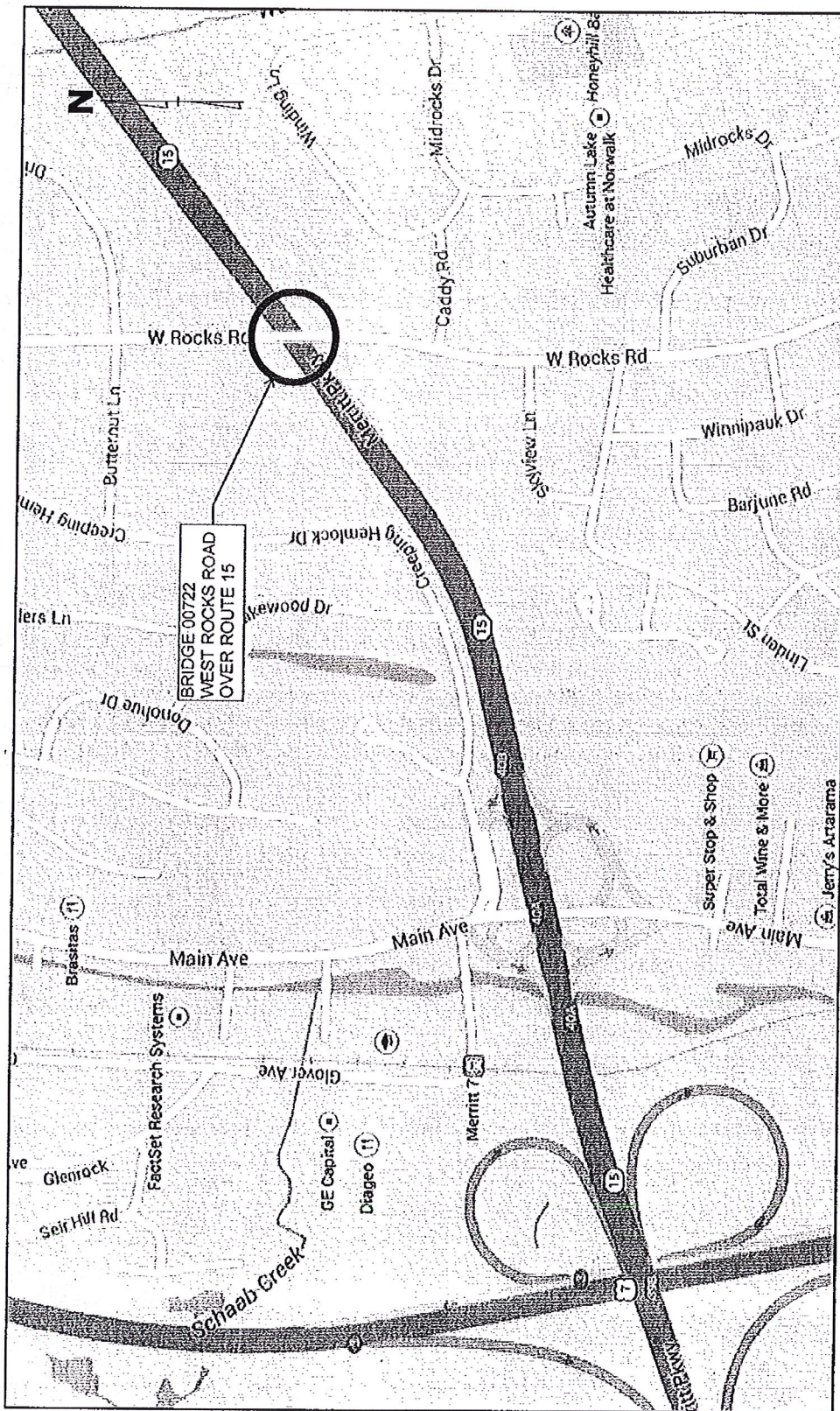
It is anticipated that one construction season will be required. A 12-week closure Bridge 00722 and West Rocks Road and a detour of pedestrian and vehicular traffic during the summer is required due to the narrow bridge width and existing girder configuration. Material procurement, storage, mobilization, and minor construction, will precede the closure and ancillary construction activities will occur after West Rocks Road is re-opened. Alternating one-way traffic operations may also be required after the re-opening of the road. There is a proposed detour of approximately 4.8 miles using local roads.

Minor impact to Merritt Parkway traffic will be necessary for installation of a temporary working platform. Temporary traffic barriers will be installed near platform supports, along with a temporary travel lane shift.

Overhead utilities span the Merritt Parkway following the bridge on the East side. It is anticipated that the overhead utility poles need to be relocated to facilitate construction. A water main runs through the bridge deck and will need to be relocated.

Final Design Plans: 07/12/2017

**Anticipated Construction Start: Spring 2018
Anticipated Construction Completion: Fall 2018**



STATE PROJECT NO.:

0102-356

CITY/TOWN:

NORWALK



STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION



OFFICE OF
ENGINEERING



DATE:

LOCATION MAP