SURVEY REPORT

PRE-RENOVATION INVESTIGATIVE SURVEY FOR HAZARDOUS BUILDING MATERIALS

WINDSOR MAINTENANCE FACILITY ROOF REPLACEMENT PROJECT WINDSOR, CONNECTICUT

Project No. 164-241

Prepared for

State of Connecticut
Department of Transportation
Newington, Connecticut

Prepared by

TRC
Windsor, Connecticut

Issued
September 2019

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Windsor, Connecticut

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

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

TRC Project No. 289951.6012.0710
Issued-September 2019

TRC
21 Griffin Road North
Windsor, Connecticut 06095
Telephone (860) 298-9692
Facsimile (860) 298-6380

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PROJECT OUTLINE

DOT Project No.:	164-241
Assignment No.:	519-6012
DOT Project Manager:	Cornato R. Vella
Site Address:	Windsor Maintenance Facility 357 Bloomfield Avenue, Windsor, CT
TRC Project No.:	289951.6012.0710
Asbestos Inspector:	Hilton Hernandez (LIC #000424) Jaime Robinson (LIC #000993)
Lead Inspector:	Tyler Noll
Date(s) of Inspection:	8/15/19
Asbestos Identified:	Yes
Lead Paint Identified:	Yes, however all XRF readings on non-metallic items tested <1.0 mg/cm^2
Gen. Bldg. Mat. Haz Waste:	No, per EPA/CTDEEP memo dated January 26, 2004
Add'l Haz./Reg. Mat./Waste/Items:	None in renovation scope impact

Additional Notes:

The property consists of a one-story repair garage facility which is scheduled for roof replacement. A PVC roof system will be installed to replace the existing EPDM roof and insulation down to the metal deck over the office and bays as well as the existing built-up roof and insulation down to the metal deck over the stores area. Additional work includes the removal/replacement of gutters, downspouts, vent boots and rooftop exhaust fans/curbs. The brick boiler chimney will also be removed and replaced with a metal chimney. Interior acoustical ceiling tiles in the Hallway, Vestibule, Women's Room and Locker Room will be removed and replaced. No existing roofing debris above existing ceiling tile. No tar on metal deck below membrane roof. No suspect PCB caulks on roof.

TABLES

TABLE 1
BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS
WINDSOR MAINTENANCE FACILITY – ROOF REPLACEMENT PROJECT
357 BLOOMFIELD AVENUE, WINDSOR, CONNECTICUT

Sample No.	Sample Location	Type of Homogeneous Material	% and Type Asbestos
2001 EnviroMed Bulk Sample Results Pertinent to Roof/Ceiling Renovation Project			
40	Roof	Parapet coping joint sealant gray/beige (FL1)	3%
41	Roof	Parapet coping joint sealant gray/beige (FL1)	3%
42	Roof	Silver painted flashing paper – first layer (FL2)	2%
43	Roof	Silver painted flashing paper – second layer (FL2)	10%
44	Roof	Flashing cement black (FL3)	NAD+
45	Roof	Flashing cement black (FL3)	20%
46	Roof	Down spout sealant (FL4) *None found at 2019 inspection*	NAD
47	Roof	Down spout sealant (FL4) *None found at 2019 inspection*	NAD
48	Roof	Patching cement gray (PC1)	30%
49	Roof	Patching cement gray (PC1)	20%
50	Roof	Silver painted flashing paper – first layer (FL5)	2%
51	Roof	Silver painted flashing paper – second layer (FL5)	5%
52	Roof	Chimney flashing sealant white (FL6)	NAD+
53	Roof	Chimney flashing sealant white (FL6)	NAD+
54	Roof	Chimney flashing sealant gray/beige (FL6)	NAD+
55	Roof	Chimney flashing sealant gray/beige (FL6)	NAD+
56	Roof	Chimney flashing sealant brown (FL6)	NAD+
57	Roof	Chimney flashing sealant brown (FL6)	NAD+
58	Roof	Coping sealant white (FL7)	NAD
59	Roof	Coping sealant white (FL7)	NAD

NA/PVA Not analyzed/positive via inseparable association with a confirmed positive ACM
NA/PS Not analyzed/positive stop, homogeneous to sample proven to contain asbestos
ND<1% Non-detected, less than 1%
NAD No asbestos detected
\+ Although found to be negative by analysis, material is homogeneous to a determined ACM and therefore must be considered positive
1 NOB Result confirmed by TEM analyses
* Quantified by EPA 400 Point Count Method

TABLE 1 (...continued)
BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS
WINDSOR MAINTENANCE FACILITY – ROOF REPLACEMENT PROJECT
357 BLOOMFIELD AVENUE, WINDSOR, CONNECTICUT

Sample No.	Sample Location	Type of Homogeneous Material	% and Type Asbestos
60	Roof	Black flashing sealant (FL8)	NAD
61	Roof	Black flashing sealant (FL8)	NAD
62	Roof	Edge flashing (FL9)	3%
63	Roof	Edge flashing (FL9)	5%
64	Roof	Black gutter sealant (FL10)	NAD
65	Roof	Black gutter sealant (FL10)	NAD
110	Break room	2'x4' suspended ceiling tile-type I "worms & pinholes" pattern	NAD
111	Hallway	2'x4' suspended ceiling tile-type I "worms & pinholes" pattern	NAD
120	Men's Room	2'x4' suspended ceiling tile-type II gypsum matrix	NAD
121	Ladies' Room	2'x4' suspended ceiling tile-type II gypsum matrix	NAD
122	Men's Room	2'x4' suspended ceiling tile-type III vinyl covering *None found at 2019 inspection*	NAD
123	Ladies' Room	2'x4' suspended ceiling tile-type III vinyl covering *None found at 2019 inspection*	NAD
124	Ladies' Room	2'x4' suspended ceiling tile-type IV white vinyl & foil *None found at 2019 inspection*	NAD
125	Ladies' Room	2'x4' suspended ceiling tile-type IV white vinyl & foil *None found at 2019 inspection*	NAD
126	Ladies' Room	2'x4' suspended ceiling tile-type V brown matrix *None found at 2019 inspection*	NAD
127	Ladies' Room	2'x4' suspended ceiling tile-type V brown matrix *None found at 2019 inspection*	NAD
134	Roof	Built-up roofing – top layer felt paper (RF1)	NAD

NA/PVA Not analyzed/positive via inseparable association with a confirmed positive ACM
NA/PS Not analyzed/positive stop, homogeneous to sample proven to contain asbestos
ND<1% Non-detected, less than 1%
NAD No asbestos detected
\+ Although found to be negative by analysis, material is homogeneous to a determined ACM and therefore must be considered positive
I NOB Result confirmed by TEM analyses
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TABLE 1 (...continued)
BULK SAMPLE SUMMARY OF SUSPECT ASBESTOS CONTAINING MATERIALS
WINDSOR MAINTENANCE FACILITY – ROOF REPLACEMENT PROJECT
357 BLOOMFIELD AVENUE, WINDSOR, CONNECTICUT

Sample No.	Sample Location	Type of Homogeneous Material	% and Type Asbestos
135	Roof	Built-up roofing – second layer felt paper (RF1)	NAD
136	Roof	Built-up roofing – third layer felt paper (RF1)	NAD
137	Roof	Built-up roofing – bottom layer vapor barrier (RF1)	NAD
138	Roof	Built-up roofing – top layer felt paper (RF1)	NAD
139	Roof	Built-up roofing – second layer felt paper (RF1)	NAD
140	Roof	Built-up roofing – third layer felt paper (RF1)	NAD
141	Roof	Built-up roofing – bottom layer vapor barrier (RF1)	NAD
2019 TRC Bulk Sample Results			
1	Roof 2 chimney	FL6 – white, gray and brown chimney flashing sealant	6.32% chrysotile[1]
2	Roof 2	FL7 – white roof flashing coping sealant	ND[1]
3	Roof 1	FL8 – black roof flashing sealant	ND[1]
4	Roof 1	FL10 – black gutter sealant	ND[1]
5	Roof 2	RF1 – built-up roofing, particle board layers with a tar coating over concrete roof base	ND[1]

NA/PVA Not analyzed/positive via inseparable association with a confirmed positive ACM
NA/PS Not analyzed/positive stop, homogeneous to sample proven to contain asbestos
ND<1% Non-detected, less than 1%
NAD No asbestos detected
‹ Although found to be negative by analysis, material is homogeneous to a determined ACM and therefore must be considered positive
1 NOB Result confirmed by TEM analyses
* Quantified by EPA 400 Point Count Method

TABLE 2
IDENTIFIED ASBESTOS CONTAINING MATERIALS (>1%)
WINDSOR MAINTENANCE FACILITY – ROOF REPLACEMENT PROJECT
357 BLOOMFIELD AVENUE, WINDSOR, CONNECTICUT

Material	Sampled/ Assumed (mo/yr)	General Location	NESHAP Category	AHERA Category	Estimated Quantity
Relative to the Roof Replacement Project					
Parapet coping joint sealant gray/beige (FL1)	EnviroMed 2001	Roof parapet capping joints	Category I Non-friable	Miscellaneous	80 SF
Silver painted flashing paper – first & second layers (FL2)	EnviroMed 2001	Roof 2 eastern side	Category I Non-friable	Miscellaneous	200 SF
Flashing cement black (FL3)	EnviroMed 2001	Roof 2 southern side	Category I Non-friable	Miscellaneous	640 SF
Patching cement gray (PC1)	EnviroMed 2001	Roof 2 – near eastern edge	Category I Non-friable	Miscellaneous	5 SF
Silver painted flashing paper – first & second layers (FL5)	EnviroMed 2001	Roof 2 chimney	Category I Non-friable	Miscellaneous	20 SF
Edge flashing (FL9)	EnviroMed 2001	Roof – northern edge	Category I Non-friable	Miscellaneous	212 SF
FL6 – white, gray and brown chimney flashing sealant	TRC 2019	Roof 2 chimney	Category I Non-friable	Miscellaneous	10 SF

AHERA Categories = thermal system insulation (TSI), surfacing material or miscellaneous
NESHAP Categories – friable, category I non-friable or category II non-friable
Friable = crumbled, pulverized or reduced to powder by hand pressure when dry
Category I Non-friable = packings, gaskets, resilient floor covering and asphalt roofing
Category II Non-friable = all non-friable that is not Category I

TABLE 3
CONFIRMED NON-ASBESTOS CONTAINING MATERIALS (<1%)
WINDSOR MAINTENANCE FACILITY – ROOF REPLACEMENT PROJECT
357 BLOOMFIELD AVENUE, WINDSOR, CONNECTICUT

Material	General Location
Relative to the Roof Replacement Project	
Down spout sealant (FL4) *None found at 2019 inspection*	Roof
Coping sealant white (FL7)	Roof 2
Black flashing sealant (FL8)	Roof 1, Roof 2
Black gutter sealant (FL10)	Roof 1
2'x4' suspended ceiling tile-type I "worms & pinholes" pattern	Break room, Hallway
2'x4' suspended ceiling tile-type II gypsum matrix	Men's Room, Ladies' Room
2'x4' suspended ceiling tile-type III vinyl covering *None found at 2019 inspection*	Men's Room, Ladies' Room
2'x4' suspended ceiling tile-type IV white vinyl & foil *None found at 2019 inspection*	Ladies' Room
2'x4' suspended ceiling tile-type V brown matrix *None found at 2019 inspection*	Ladies' Room
Built-up roofing – bottom through third layer (RF1)	Roof 2

**** However, associated layers are positive.***

TABLE 4
SUMMARY OF LEAD PAINT XRF MEASUREMENTS
WINDSOR MAINTENANCE FACILITY – ROOF REPLACEMENT PROJECT
357 BLOOMFIELD AVENUE, WINDSOR, CONNECTICUT

Structure	No. of Measurements	Calibrations	Void	Lead Detected	No Lead Detected
EnvIroMed 2001					
DOT Repair Garage	140	3	0	33	104
TRC 8/15/19					
DOT Repair Garage Roof & Ceiling Related	29	7	0	8	14

See Lead Paint XRF Measurement Table in Appendix 1.

*The only components projected for possible impact during roof replacement project are metallic beams/trusses/columns/etc. Metal decking is unpainted

TABLE 5
SUMMARY OF COMPOSITE BUILDING MATERIAL WASTE CHARACTERIZATION
WINDSOR MAINTENANCE FACILITY – ROOF REPLACEMENT PROJECT
357 BLOOMFIELD AVENUE, WINDSOR, CONNECTICUT

Waste Stream	Metal	mg/L Leachate	Hazardous/Non-Hazardous
Bldg. Material Composite (Excluding metal substrates)	**No TCLP sample for Lead warranted as XRF readings on non-metallic components were all below 1.0 mg/cm² and therefore the debris is presumed as non-hazardous per CTDEEP/USEPA clarification memo of January 26, 2004.**		

Note: Any metal components should be recycled to promote waste minimization efforts, rather than disposed of, and the recycling operation is exempt from the USEPA RCRA and CTDEEP Hazardous Waste regulations.

See Appendix J for CTDEEP/USEPA clarification memo of January 26, 2004.

BDL - Below Detection Limit
ND - Not Detected

TABLE 6
INVENTORY OF ADDITIONAL HAZARDOUS/REGULATED MATERIALS, WASTES AND ITEMS IDENTIFIED
WINDSOR MAINTENANCE FACILITY – ROOF REPLACEMENT PROJECT
357 BLOOMFIELD AVENUE, WINDSOR, CONNECTICUT

Quantity	Size	Material/Item	General Location	Potential Hazard
NO HAZARDOUS/REGULATED MATERIALS, WASTES OR ITEMS IDENTIFIED IN THE SUBJECT ROOF REPLACEMENT AREA				

*Also no suspect PCB caulks identified in the roof replacement project area.

CRW- Connecticut Regulated Waste – PCBs (CR01), Oils (CR02/CR03), waste chemical liquids - antifreeze, latex & solvent paints, sludges, etc. (CR04), waste chemical solids (CR05)
UW- Universal Waste (batteries, thermostat ampoules, fluorescent lamps, used electronics)
IH- Inhalation hazard (silicas, etc.)
I- Ignitable - may contain ingredients which are ignitable (materials which have a flashpoint <140°F) (D001)
C- Corrosive - may contain ingredients which are alkaline or acidic (materials with a PH<2 or >12.5) (D002)
T- Toxic - may contain ingredients which are harmful if swallowed or which release vapors that can cause irritation
R- Reactive – may contain ingredients which are unstable, react violently with water or are explosive (D003)

APPENDIX A

SITE PHOTOS WITH DOT ASSIGNMENT AND MAP

PHOTO 1. A Side.

PHOTO 2. A-B Sides.

PHOTO 3. C Side.

PHOTO 4. D Side.

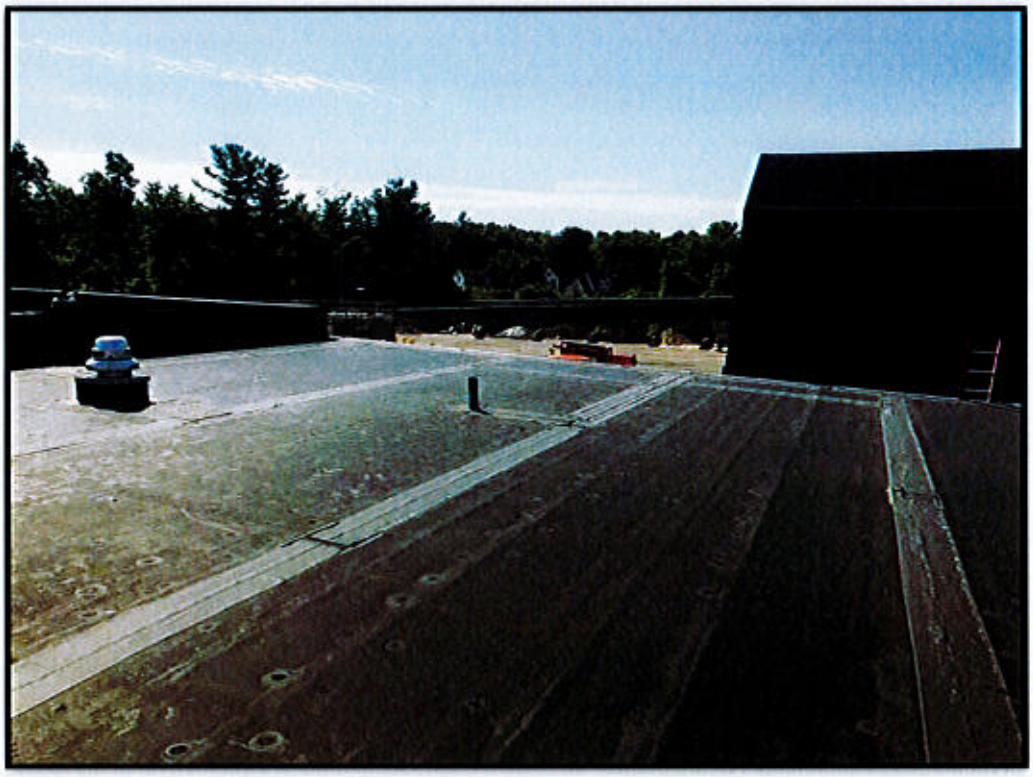


PHOTO 5. Roof 1.

PHOTO 6. Roof 2.

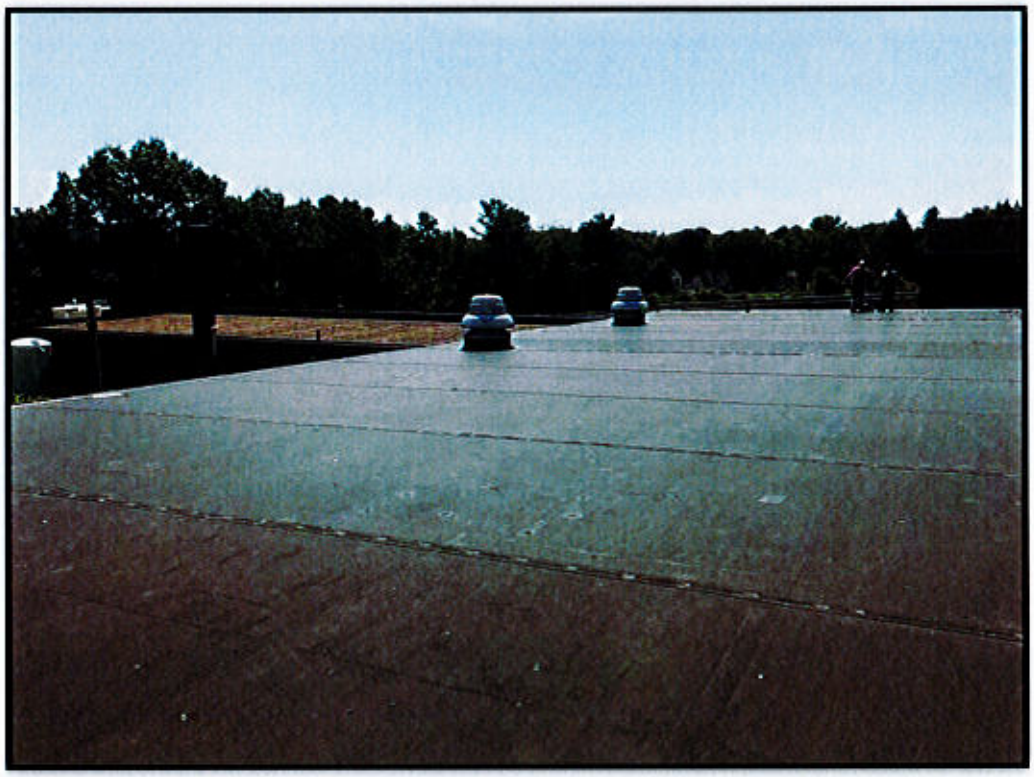


PHOTO 7. Roof 3.

SCOPE OF WORK

Project Name: The Roof Replacement of the Maintenance Facility
Project Location: Windsor
Project Manager: Michael Strong
Project Engineer: Shinel Mercado

Date: April 9, 2019

Objective:

The existing EPDM and Built-up roof at the Windsor Maintenance Facility is currently leaking rain water into the building. This project will replace the existing roofs and other related components.

Scope:

The scope of work includes the removal of the existing EPDM and Built-up roof covering and insulation down to the metal and concrete deck.

A Polyvinyl Chloride (PVC) roof system inclusive of insulation and roof board will be installed.

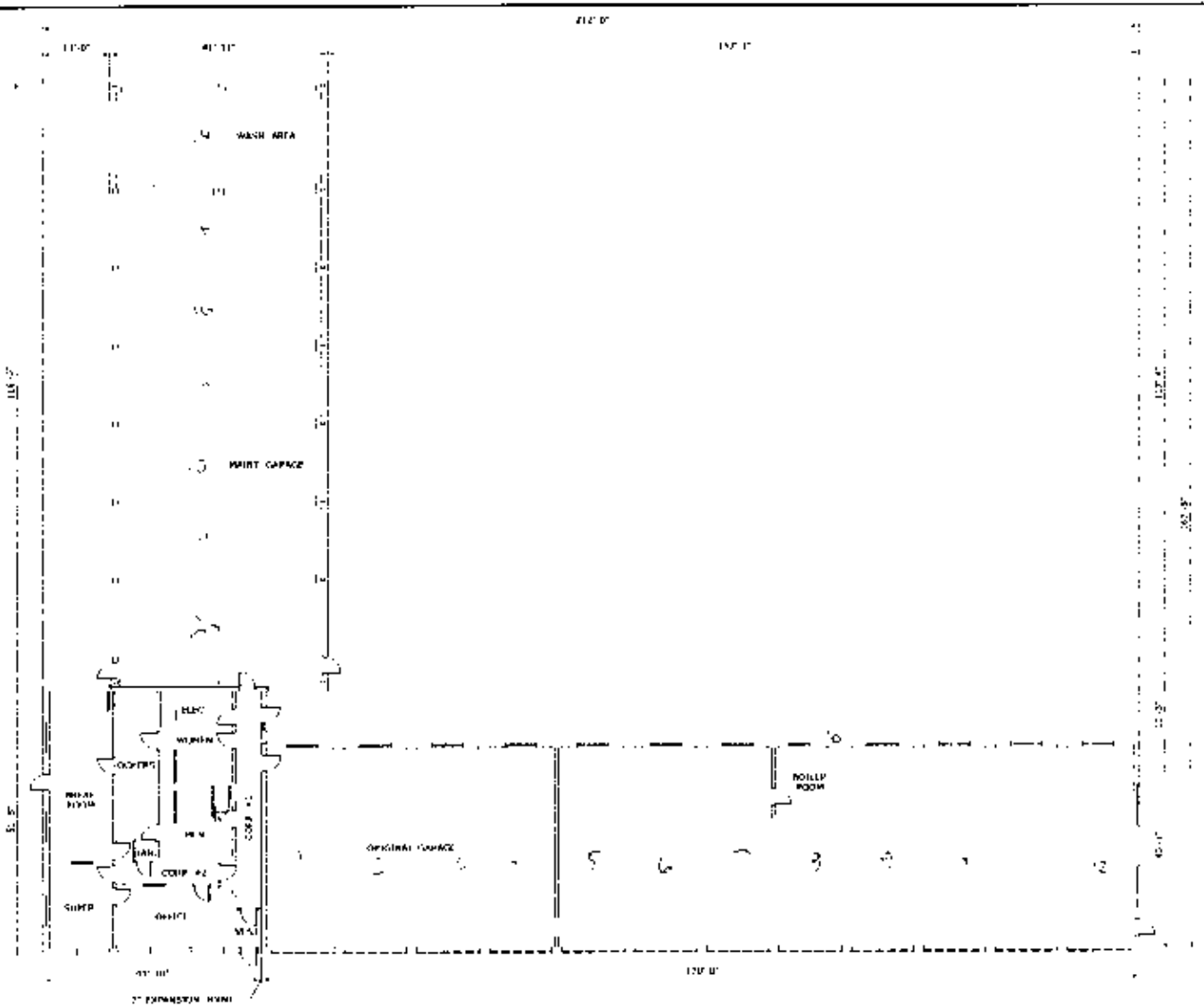
Additional work includes:

1. All gutters and downspouts will be removed and replaced.
2. All plumbing vents will remain with the exception of the one vent located at the concrete roof deck.
3. The vent boots will be removed and replaced.
4. All rooftop exhaust fans and curbs will be removed and replaced.
5. A roof access ladder will be installed at the exterior of the building.
6. Metal ladders will be installed on the roof at the low to high roof transitions.
7. Fall protection systems will be installed where required.
8. The brick boiler chimney will be removed and replaced with a metal chimney.
9. The interior acoustical ceiling tiles in the Hallway, Vestibule, Women's room and Locker room will be removed and replaced.

Windsor Maintenance Facility
335 Bloomfield Avenue
Bloomfield Ave
William St
Bloomfield Ave park n ride
335 Bloomfield Ave Parking
Automotive Finance Corporation
Agricultural Experiment Sta
Interstate 91 HOV
Google


EXIT
Water damage at interior face of Insulated Metal Wall Panels.


Water damage at interior face of Insulated Metal Wall Panels.



SEMI FINAL DESIGN REVIEW

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

OFFICE OF ENGINEERING

THE ROOF REPLACEMENT OF THE MAINTENANCE FACILITY

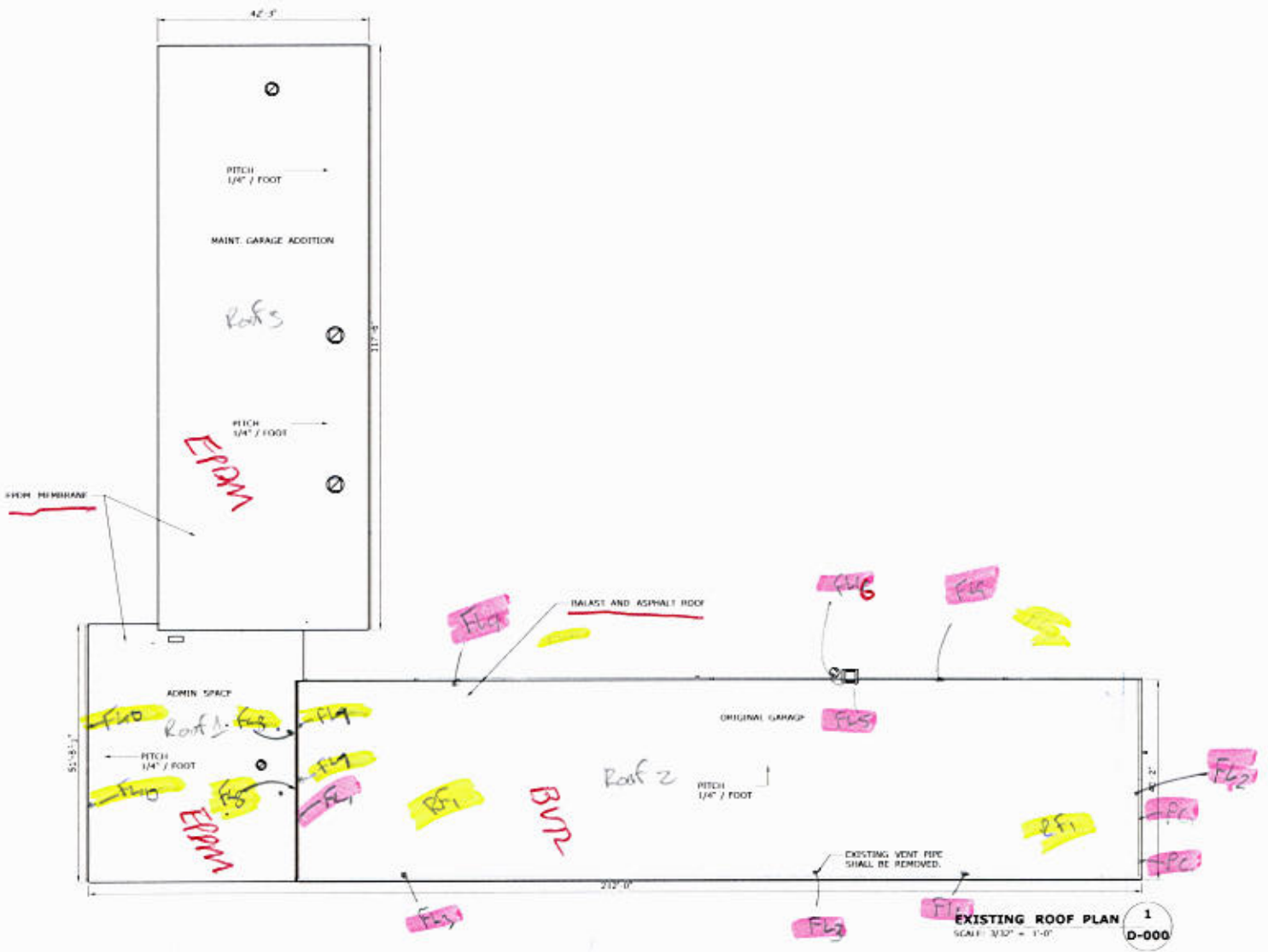
WINDSOR

EXISTING CONDITIONS FLOOR PLAN

D-000

APPENDIX B

SITE SKETCHES



	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	OFFICE OF ENGINEERING	WINDSOR MAINTENANCE FACILITY ROOF REPLACEMENT	WINDSOR	
SCALE AS NOTED				EXISTING ROOF PLAN	

APPENDIX C

TRC INSPECTORS LICENSES/CERTIFICATIONS

State of Connecticut

Lookup Detail View

Name

Name
HILTON HERNANDEZ

License Information

lookup

License Type	License Number	Expiration Date	Granted Date	License Name	License Status		Licensure Actions or Pending Charges
Asbestos Consultant-Inspector	424	01/31/2020	05/12/2000	Hilton Hernandez	ACTIVE	CURRENT	None

Generated on: 9/3/2019 11:22:36 AM

Certificate of Training

Awarded to

HILTON HERNANDEZ

For successful completion of a 4 Hour, 1/2 Day

Asbestos Building Inspector
Annual Refresher Training
JANUARY 2, 2019

This training was approved and given in accordance with the Regulations for Connecticut State Agencies RCSA 20 - 440 - 1-9 and RCSA 20 - 441 and meets the requirements of the EPA Revised MAP under TSCA Title II of 4/4/94.

Presented by

Mystic Air Quality Consultants, Inc.
1204 North Road, Groton, CT 06340 (800) 247-7746

Certificate Number: ABIRF27207

Exam Grade: 100

Exam Date: 01/02/2019

Expiration Date: 01/02/2020

Christopher J. Eident, CIH, CSP, RS

George Williamson, Training Director
Richard Haffey, Training Director

1001692 01 AB 0.409 **AUTO 14 0.0664 06237 150518 CD1 P01693 1

JAIME B ROBINSON
18 HUNT RD
COLUMBIA CT 06237-1505

Dear JAIME B ROBINSON,

Attached you will find your validated certificate for the coming year. Should you have any questions about your certificate renewal, please do not hesitate to write or call:

Department of Public Health
P.O. Box 340308
M.S.#12MQA
Hartford, CT 06134-0308

(860) 509-7603
oplc.dph@ct.gov
www.ct.gov/dph/license

Sincerely,

RAUL PINO, MD, MPH, COMMISSIONER
DEPARTMENT OF PUBLIC HEALTH

1001692-0001699-0000001 of 0000001-C01-a1d00101-0664-01695

EMPLOYER'S COPY

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

NAME
JAIME B ROBINSON

VALIDATION NO.	CERTIFICATE NO.	CURRENT THROUGH
03-734543	000993	01/31/20

PROFESSION
ASBESTOS CONSULTANT-INSPECTOR

SIGNATURE COMMISSIONER

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

PURSUANT TO THE PROVISIONS OF THE GENERAL STATUTES OF CONNECTICUT
THE INDIVIDUAL NAMED BELOW IS CERTIFIED
BY THIS DEPARTMENT AS A
ASBESTOS CONSULTANT-INSPECTOR

JAIME B ROBINSON

CERTIFICATE NO.
000993
CURRENT THROUGH
01/31/20
VALIDATION NO.
03-734543

SIGNATURE COMMISSIONER

INSTRUCTIONS:

1. Detach and sign each of the cards on this form
2. Display the large card in a prominent place in your office or place of business.
3. The wallet card is for you to carry on your person. If you do not wish to carry the wallet card, place it in a secure place.
4. The employer's copy is for persons who must demonstrate current licensure/certification in order to retain employment or privileges. The employer's card is to be presented to the employer and kept by them as a part of your personnel file. Only one copy of this card can be supplied to you.

WALLET CARD

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

NAME
JAIME B ROBINSON

VALIDATION NO.	CERTIFICATE NO.	CURRENT THROUGH
03-734543	000993	01/31/20

PROFESSION
ASBESTOS CONSULTANT-INSPECTOR

SIGNATURE COMMISSIONER

CERTIFICATE OF ACHIEVEMENT

This certifies that

Jaime Robinson

has successfully completed the

4 Hour Asbestos Site Inspector Refresher Training
Asbestos Accreditation Under TSCA Title II
40 CFR Part 763

conducted by

ATC Group Services LLC
73 William Franks Drive
West Springfield, MA 01089
(413) 781-0070

Principal Instructor: Thomas Dion

December 13, 2018
Date of Course

December 13, 2019
Expiration Date

Regional Training Manager: Gregory Morsch

SIAR-6183
Certificate Number

December 13, 2018
Examination Date

NITON XLp 300 SERIES
ANALYZER TRAINING
(A. Minalga, RSO- April 2019)

- INTRODUCTION and TRC PROCEDURES
  - Instrument/case/components/accessories ✓
  - Radiation safety (Shutter operation) ✓
  - Storage/sign-out ✓
  - Transport requirements and outside packaging labels ✓
  - State/Federal regulations for use/shipping ✓
  - Leak Testing documentation ✓

- INSTRUMENT USE
  - Power on/off and menu options ✓
  - Calibrations ✓
  - K&L vs Standard Mode ✓
  - Collecting Measurements ✓
  - Data entry/deletion ✓
  - Downloading Procedures ✓

Training Completed by: Tyler Noll Date of Training: 7/14/19

Signature: [signature]

Instructor: A. Minalga, RSO

Instructor Signature: [signature]

TRC

APPENDIX D

LABORATORY ACCREDITATIONS

State of Connecticut, Department of Public Health

Approved Environmental Laboratory

THIS IS TO CERTIFY THAT THE LABORATORY DESCRIBED BELOW HAS BEEN APPROVED BY THE STATE DEPARTMENT OF PUBLIC HEALTH PURSUANT TO APPLICABLE PROVISIONS OF THE PUBLIC HEALTH CODE AND GENERAL STATUTES OF CONNECTICUT, FOR MAKING THE EXAMINATIONS, DETERMINATIONS OR TESTS SPECIFIED BELOW WHICH HAVE BEEN AUTHORIZED IN WRITING BY THAT DEPARTMENT.

TRC ENVIRONMENTAL CORPORATION

LOCATED AT 21 Griffin Road North IN Windsor, CT 06095

AND REGISTERED IN THE NAME OF Erik Plimpton

THIS CERTIFICATE IS ISSUED IN THE NAME OF Kathleen Williamson WHO HAS BEEN DESIGNATED BY THE REGISTERED OWNER/AUTHORIZED AGENT TO BE IN CHARGE OF THE LABORATORY WORK COVERED BY THIS CERTIFICATE OF APPROVAL AS FOLLOWS:

BUILDING MATERIALS
ASBESTOS FIBERS – PCM
BULK IDENTIFICATION – PLM

SEE COMPUTER PRINT-OUT FOR SPECIFIC TESTS APPROVED

EFFECTIVE RENEWAL DATE JANUARY 1, 2018

THIS CERTIFICATE EXPIRES DECEMBER 31, 2019 AND IS REVOCABLE FOR CAUSE BY THE STATE DEPARTMENT OF PUBLIC HEALTH

DATED AT HARTFORD, CONNECTICUT, THIS 19th DAY OF December, 2017

Registration No.

PH-0426

SUZANNE BLANCAFLOR, MS, MPH
CHIEF, ENVIRONMENTAL HEALTH SECTION

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 101424-0

TRC Environmental Corporation

Windsor, CT

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2019-07-01 through 2020-06-30

Effective Dates

DEPARTMENT OF COMMERCE * UNITED STATES OF AMERICA *

For the National Voluntary Laboratory Accreditation Program

NVLAP® National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

TRC Environmental Corporation
21 Griffin Road North
Windsor, CT 06095
Ms. Kathleen Williamson
Phone: 860-298-6392 Fax: 860-298-6214
Email: kwilliamson@trccompanies.com
https://www.trccompanies.com/

ASBESTOS FIBER ANALYSIS — NVLAP LAB CODE 101424-0

Bulk Asbestos Analysis

Code	*Description*
18/A01	EPA – 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

State of Connecticut, Department of Public Health

Approved Environmental Laboratory

THIS IS TO CERTIFY THAT THE LABORATORY DESCRIBED BELOW HAS BEEN APPROVED BY THE STATE DEPARTMENT OF PUBLIC HEALTH PURSUANT TO APPLICABLE PROVISIONS OF THE PUBLIC HEALTH CODE AND GENERAL STATUTES OF CONNECTICUT, FOR MAKING THE EXAMINATIONS, DETERMINATIONS OR TESTS SPECIFIED BELOW WHICH HAVE BEEN AUTHORIZED IN WRITING BY THAT DEPARTMENT.

PROSCIENCE ANALYTICAL SERVICES, INC.

LOCATED AT 22 Cummings Park IN Woburn, MA 01801

AND REGISTERED IN THE NAME OF Harvey Yee

THIS CERTIFICATE IS ISSUED IN THE NAME OF Aimee Cormier WHO HAS BEEN DESIGNATED BY THE REGISTERED OWNER/AUTHORIZED AGENT TO BE IN CHARGE OF THE LABORATORY WORK COVERED BY THIS CERTIFICATE OF APPROVAL AS FOLLOWS:

SOLID WASTE/SOIL
Examination for:
Total Metals

ASBESTOS
Bulk Identification (PLM + TEM)
Air–Fiber Counting (PCM + TEM)

ENVIRONMENTAL HEALTH & HOUSING
Lead In Paint
Lead (Paint) in Soil
Lead in Dust Wipes

SEE COMPUTER PRINT-OUT FOR SPECIFIC TESTS APPROVED

EFFECTIVE RENEWAL DATE January 1, 2019

THIS CERTIFICATE EXPIRES December 31, 2020 AND IS REVOCABLE FOR CAUSE BY THE STATE DEPARTMENT OF PUBLIC HEALTH

DATED AT HARTFORD, CONNECTICUT, THIS 4th DAY OF December, 2018

Registration #
PH–0209

Barbara S. Cass

Barbara S. Cass, R.N.
Branch Chief
Healthcare Quality and Safety Branch

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 200090-0

ProScience Analytical Services, Inc.

Woburn, MA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2019-01-01 through 2019-12-31

Effective Dates

For the National Voluntary Laboratory Accreditation Program

NVLAP® National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

ProScience Analytical Services, Inc.
22 Cummings Park
Woburn, MA 01801-2122
Ms. Aimee Cormier
Phone: 781-935-3212 Fax: 781-932-4857
Email: aimee.cormier@proscience.net
http://www.proscience.net

ASBESTOS FIBER ANALYSIS — NVLAP LAB CODE 200090-0

Bulk Asbestos Analysis

Code	*Description*
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Airborne Asbestos Analysis

Code	*Description*
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program

APPENDIX E

TRC ASBESTOS BULK SAMPLE CHAIN OF CUSTODY FORMS

NT17957

TRC
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 #. 54123

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
289951.	ConnDOT Windsor ME, 357 Bloomfield Avenue, Windsor, Connecticut		PLM: ☐ 8hr ☐ 24hr ☐ 48hr ☐ 3day TEM: ☐ 24hr X 48hr ☐ 3day ☐ 5day
SIGNATURE	INSPECTOR		
	Hilton Hernandez, Jaime Robinson, Tyler Noll		

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	8/15/19	11:13		X	Roof 2 chimney	X		*		X	FL6 – White, gray and brown chimney flashing sealant
2	8/15/19	11:17		X	Roof 2	X				X	FL7 – White roof flashing coping sealant
3	8/15/19	11:19		X	Roof 1	X				X	FL8 – Black roof flashing sealant
4	8/15/19	11:25		X	Roof 1	X				X	FL10 – Black gutter sealant
5	8/15/19	11:39		X	Roof 2	X		*		X	RF1 – Built up roofing, particle board layers with a tar coating over concrete roof base

Relinquished by: (Signature)	Date:	Received by: (Signature) 8/16/19	Relinquished by: (Signature)	Date:	Received by: (Signature)
(Printed) Hilton Hernandez	Time: 1430	(Printed) 0900	(Printed)	Time:	(Printed)

Remarks: Results to Hilton H. and Steve A., please.

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

NT 17957

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: 08/19/19

PO#: **C289951**
Client: TRC
Client Job#: 289951.xxxx.0710
Client Job Ref./Loc.: CT DOT- Windsor MF, 357 Bloomfield Avenue, Windsor, CT
Relinquished by: K. Williamson- KWilliamson@trcsolutions.com
Received by: Pierce Jennifer Cole 8/20/19 9:30
Report to: E. Plimpton- EPlimpton@trccompanies.com & SArienti@trccompanies.com
Samplers Name: H. Hernandez, J. Robinson & T. Noll

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

Turnaround 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**
1	54123	Flashing Sealant	See COC		
2	54123	Flashing Sealant			
3	54123	Flashing Sealant			
4	54123	Gutter Sealant			
5	54123	Built up Roofing			

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

APPENDIX F

TRC ASBESTOS TEM LABORATORY ANALYSIS DATA

ProScience Analytical Services, Inc.

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

Laboratory Report

Client Project #: 289951.6012.0710
Client Reference: CT DOT - Windsor MF, 357 Bloomfield Avenue, Windsor, CT
PO #: C289951
Client #: 297
Client Name: TRC Companies, Inc. (CT)

Batch: NT 17957
Method: NOB
Date Received: 8/20/2019
Date Analyzed: 8/21/2019
Date of Report: 8/22/2019

LAB ID	Field ID	Description:	Color	Initial Weight	% Asbestos Types CHR	AMO	ACT	CRO	ANT	TRE	% Other Non-asb.	% Organic	% Carb.	Total % Asbestos	Analyzed / Charged	Preped / Charged
NT135269	1	White, Gray and Brown Chimney Flashing Sealant		.1476	6.32	.00	.00	.00	.00	.00	18.95	60.37	14.36	**6.32**	Yes	**No**
NT135270	2	White Roof Flashing Coping Sealant		.7751	.00	.00	.00	.00	.00	.00	4.39	67.48	28.13	**ND**	Yes	No
NT135271	3	Black Roof Flashing Sealant		.3887	.00	.00	.00	.00	.00	.00	7.30	31.88	60.82	**ND**	Yes	No
NT135272	4	Black Gutter Sealant		.4583	.00	.00	.00	.00	.00	.00	17.54	53.24	29.22	**ND**	Yes	No
NT135273	5	Built-up Roofing		.8510	.00	.00	.00	.00	.00	.00	9.24	89.88	.88	**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

APPENDIX G

TRC LEAD PAINT XRF MEASUREMENT TABLE

Lead Based Paint Measurement Summary Table

Device(s):	**Niton XLP301-A (Serial #24792) X Ray Fluorescence (XRF) Spectrum Analyzer**
Site:	**Windsor Maintenance Facility, 357 Bloomfield Avenue, Windsor, Connecticut**
Project # :	**289951-6012-0710**
Date(s):	**8/15/2019**
Inspector:	**Tyler Noll**

Number	Room	Side	Structure	Feature	Material	Color	Reading (mg/cm2)	Precision (mg/cm2)	Depth Index	Duration (sec)	Date/Time
1	**Shutter calibration**						1.6	0.0		199.1	8/15/2019 8:28
2	**3.5 calibration**						3.6	0.3	1.27	3.6	8/15/2019 8:31
3	**1.6 calibration**						1.5	0.1	1.15	4.99	8/15/2019 8:31
4	**0.3 calibration**						0.3	0.0	1.01	10.21	8/15/2019 8:32
5	Exterior	B	Gutter		Metal	Dark green	-0.1	0.4	4.04	5.21	8/15/2019 8:47
6	Exterior	B	Gutter		Metal	Dark green	0.0	0.0	1.59	6.1	8/15/2019 8:48
7	Exterior	B	Gutter		Metal	Dark green	-0.2	0.3	3.09	5.46	8/15/2019 8:49
8	Exterior	B	Gutter		Metal	Dark green	0.0	0.0	1	5.12	8/15/2019 8:51
9	Garage 14-20		Column	--	Metal	Grey	0.0	0.0	1	4.36	8/15/2019 9:02
10	Garage 14-20		Column	--	Metal	Grey	0.0	0.0	2.97	5.12	8/15/2019 9:03
11	Garage 14-20		Cross beams	--	Metal	Grey	0.0	0.0	1	5.86	8/15/2019 9:04
12	Garage 14-20		Cross beams	--	Metal	Grey	0.0	0.1	4.34	5.12	8/15/2019 9:06
13	Garage 14-20		Wall	--	Metal	Grey	0.0	0.0	1	5.22	8/15/2019 9:08
14	Garage 14-20		Wall	--	Metal	Grey	0.0	0.0	1	4.99	8/15/2019 9:09
15	Garage 14-20		Column	--	Metal	Grey	0.0	0.1	3.41	1.12	8/15/2019 9:09
16	Garage 14-20		Column	--	Metal	Grey	0.0	0.0	1.3	4.85	8/15/2019 9:10
17	Garage 14-20		Ceiling	Truss	Metal	Grey	0.0	0.0	1.74	4.48	8/15/2019 9:12
18	Garage 14-20		Ceiling	Truss	Metal	Grey	0.0	0.0	1	4.24	8/15/2019 9:13
19	Garage 1-4		I-beam	--	Metal	Grey	**2.3**	0.2	1.39	5.23	8/15/2019 10:46
20	Garage 1-4		I-beam	--	Metal	Grey	**2.1**	0.2	1.32	5.59	8/15/2019 10:48
21	Garage 1-4		Large I-beam		Metal	Grey	**1.7**	2.3	1.56	0.12	8/15/2019 10:52
22	Garage 1-4		Large I-beam		Metal	Grey	**1.8**	0.4	1.52	2.74	8/15/2019 10:52
23	Garage 5-12		Large I-beam		Metal	Grey	**4.8**	1.2	1.44	4.73	8/15/2019 10:58
24	Garage 5-12		Large I-beam		Metal	Grey	**2.5**	0.2	1.53	4.96	8/15/2019 11:00
25	Garage 5-12		I-beam		Metal	Grey	**2.3**	0.2	1.39	4.85	8/15/2019 11:03
26	Garage 5-12		I-beam		Metal	Grey	**2.0**	0.4	1.31	2.74	8/15/2019 11:04
27	**3.5 calibration**		--		--		3.6	0.3	1.29	4.11	8/15/2019 11:15
28	**1.6 calibration**		--		--		1.6	0.1	1.19	4.86	8/15/2019 11:16
29	**0.3 calibration**		--		--		0.3	0.0	1.13	10.21	8/15/2019 11:17

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

Side A = Street side; Sides B,C,D follow clockwise

APPENDIX H

COMPOSITE BUILDING MATERIAL WASTE CHARACTERIZATION DATA

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

January 26, 2004

Mr. Erik R. Plimpton, P.E., CHMM, Senior Consulting Engineer
TRC Environmental Corporation
5 Waterside Crossing
Windsor, CT 06095

RE: Characterization of lead-based paint debris.

Dear Mr. Plimpton:

Pursuant to our recent discussions by email, I am writing to confirm that the policy elaborated in my July 22, 1997 letter to Steven Murdzia of ATC Associates concerning the use of XRF testing to characterize lead-based paint debris is still in effect. In particular, my statement in that letter that obtaining an XRF reading less than 1.0 mg/cm^2 is sufficient to demonstrate that a given debris is not a hazardous waste is still our current policy.

As noted in my July 22, 1997 letter, this policy is subject to the following limitations:

1.) The material being sampled consists only of building debris (such as painted wood or masonry). Non-debris materials (such as concentrated paint chips, sand blasting debris, or paint stripping wastes) may not be characterized in this manner.

2.) The material being sampled has only surficial lead contamination (i.e. lead-based paint). Materials which have more than just surficial contamination (such as floor boards soaked with lead plating solutions) may not be characterized in this manner.

3.) The material is sampled in accordance with appropriate protocols regarding sampling frequency and location, to ensure that the reading of 1.0 mg/cm^2 or less is truly representative of the material as a whole.

I should also note that this approach is only useful in situations in which all of a particular debris stream does not exceed 1.0 mg/cm^2. If portions of the debris stream exceed 1.0 mg/cm^2, you cannot use this standard to characterize the debris, and must resort to another method (such as composite sampling). In addition, in employing this method to characterize the debris, the areas which had XRF readings under the 1.0 mg/cm^2 limit must not be ignored (since falling below the standard only means they are not hazardous, not that they are lead-free).

My July 22, 1997 letter also addressed the use of the Connecticut Department of Public Health's 0.5 weight percent limit for a "toxic" level of lead under its lead abatement regulations in order to determine whether or not lead-based paint debris is hazardous. Unlike the 1.0 mg/cm^2 XRF standard, the weight percent number is not appropriate for waste characterization purposes, due to a lack of relevant data. The 1.0 mg/cm^2 XRF policy discussed above was based on certain data generated by EPA correlating XRF readings to TCLP sampling of architectural debris.[1] While EPA's data did not show a predictable relationship between these two measures, it did indicate that there was an XRF threshold below which such debris did not contain sufficient lead to fail TCLP. However, there is no similar data establishing a similar threshold for weight percent lead in lead-based paint below which debris does not fail TCLP.

I should also note that we intend to include the above policy in the next revision of our lead-based paint guidance document, Guidance for the Management and Disposal of Lead-Contaminated Materials Generated in the Lead Abatement, Renovation, and Demolition Industries, which was last revised in 1996, prior to the letter to Mr. Murdzia.

Sincerely,

Ross Q. Bunnell, Sanitary Engineer 3
Bureau of Waste Management
Engineering & Enforcement Division

RQB:rqb
Attachment: March, 1993 EPA Guidance Document

1 See in particular the March 1993 EPA guidance document entitled "Applicability of RCRA Disposal Requirements to Lead-Based Paint Abatement Wastes," Page 16, Table II. A copy of this guidance document is attached.

APPENDIX I

PRIOR 2001 ASBESTOS AND LEAD INSPECTION REPORTS

2 RI
2 Safeh

ENVIROMED SERVICES, INC.

Asbestos Inspection Report
for
Department of Transportation
Windsor Maintenance Garage
Building #81-169
Windsor, Connecticut

prepared for:

State of Connecticut
Department of Transportation

July 16, 2001

EnviroMed Project # IH-01-548

25 Science Park • New Haven, CT 06511
(203) 786-5580 • facsimile (203) 786-5579

ENVIROMED SERVICES, INC.

Asbestos Inspection Report
for
Department of Transportation
Windsor Maintenance Garage
Building #81-169
Windsor, Connecticut

prepared for:

State of Connecticut
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July 16, 2001

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I. PROJECT NARRATIVE

Overview

On July 16, 2001, a state-licensed inspector from EnviroMed Services, Inc. (EnviroMed) performed an inspection at the Department of Transportation Windsor Maintenance Facility, located in Windsor, Connecticut. The purpose of this inspection was to identify the presence of asbestos in suspect building material, so that asbestos-containing material could be removed prior to renovation.

Samples were collected according to 40 CFR Part 763.86 and 29 CFR Part 1926.1101, and analyzed using Polarized Light Microscopy (PLM).

A total of one hundred forty-three (143) bulk samples were collected. The materials sampled include: boiler rib insulation, clean-out door rope gasket, clean-out door insulation, sight door gasket, sight door insulation, burner gasket, refractory cement, refractory brick, white boiler blanket insulation, gray rib cement, paper wrap on fiberglass pipe insulation, interior window sealant, door insulation, overhead door sealant, gray/beige parapet coping joint sealant, silver painted flashing paper, black flashing cement, down spout sealant, gray patching cement, white chimney flashing sealant, gray/beige chimney flashing sealant, brown chimney flashing sealant, white coping sealant, black flashing sealant, edge flashing, black gutter sealant, two type of exterior window frame sealant, interior window sill sealant, exterior wall unit sealant, wall expansion joint sealant, two types of floor expansion joint sealer, two types of exterior door frame sealant, interior window frame sealant, interior window glazing, concrete slab sealant, black foundation flashing, door window glazing, black foam insulation, black flashing paper around wall unit, overhead door light sealant, wallboard, wallboard joint compound and tape, five types of 2'x4' suspended ceiling tiles, 12" salmon vinyl floor tile and associated mastic, 4" brown cove base molding and associated glue, aluminum window sash gasket, sink/drinking fountain sealant, all layers comprising the built-up roofing materials, and paper insulation on hot water tank panel box.

Refer to Section II, Bulk Sample Location Diagrams, for sample locations and identification.

Summary of Results

LA Testing, Inc. accredited asbestos laboratory (NVLAP #200232-0) analyzed the bulk samples. Section III presents the complete list of analytical results for samples collected. The following

presents the locations and estimated quantities of materials found to contain asbestos greater than 1.0 percent.

Main Building – Ground Floor

Boiler Room

There is approximately 50 linear feet of boiler rib insulation and gray rib cement, located on the boiler. The boiler rib insulation was found to contain 5-7 percent asbestos. The gray rib cement was found to contain 15 percent asbestos.

There is approximately 20 square feet of fire door insulation encased in the door to the boiler room. This material was found to contain 80 percent asbestos.

Offices

There is approximately 40 linear feet of interior window glazing, located on the windows between the supervisor's office and break room, and between the clerk's office and hallway. This material was found to contain 3 percent asbestos.

Roof

There is approximately 220 linear feet of gray-beige sealant applied to roof parapet capping joints. This material was found to contain 3 percent asbestos.

There is approximately 500 square feet of silver painted flashing paper (two layers) and black flashing cement, located along three edges of the built-up roof. The silver painted flashing paper was found to contain 2-10 percent asbestos. The black flashing cement was found to contain 20 percent asbestos.

There is approximately 175 square feet of edge flashing, located on the northern edge of the roof. This material was found to contain 3-5 percent asbestos.

There is approximately 2 square feet of gray patching cement, located near the eastern edge of the roof. This material was found to contain 20-30 percent asbestos.

Non-Asbestos Containing Materials Found During the Inspection

The following materials were found to contain legally insignificant amounts (0–1 percent) of asbestos: clean-out door rope gasket, clean-out door insulation, sight door gasket, sight door insulation, burner gasket, refractory cement, refractory brick, white boiler blanket insulation, paper wrap on fiberglass pipe insulation, interior window sealant, overhead door sealant, down spout sealant, white chimney flashing sealant, gray/beige chimney flashing sealant, brown chimney flashing sealant, white coping sealant, black flashing sealant, black gutter sealant, two type of exterior window frame sealant, interior window sill sealant, exterior wall unit sealant, wall expansion joint sealant, two types of floor expansion joint, two types of exterior door frame sealant, interior window frame sealant, concrete slab sealant, black foundation flashing, door window glazing, black foam insulation, black flashing paper around wall unit, overhead door light sealant, wallboard, wallboard joint compound and tape, five types of 2'x4' suspended ceiling tiles, 12" salmon vinyl floor tile and associated mastic, 4" brown cove base molding and associated glue, aluminum window sash gasket, sink/drinking fountain sealant, all layers comprising the built-up roofing materials, and paper insulation on hot water tank panel box.

See Section IV for a copy of the laboratory analysis sheets for the samples collected.

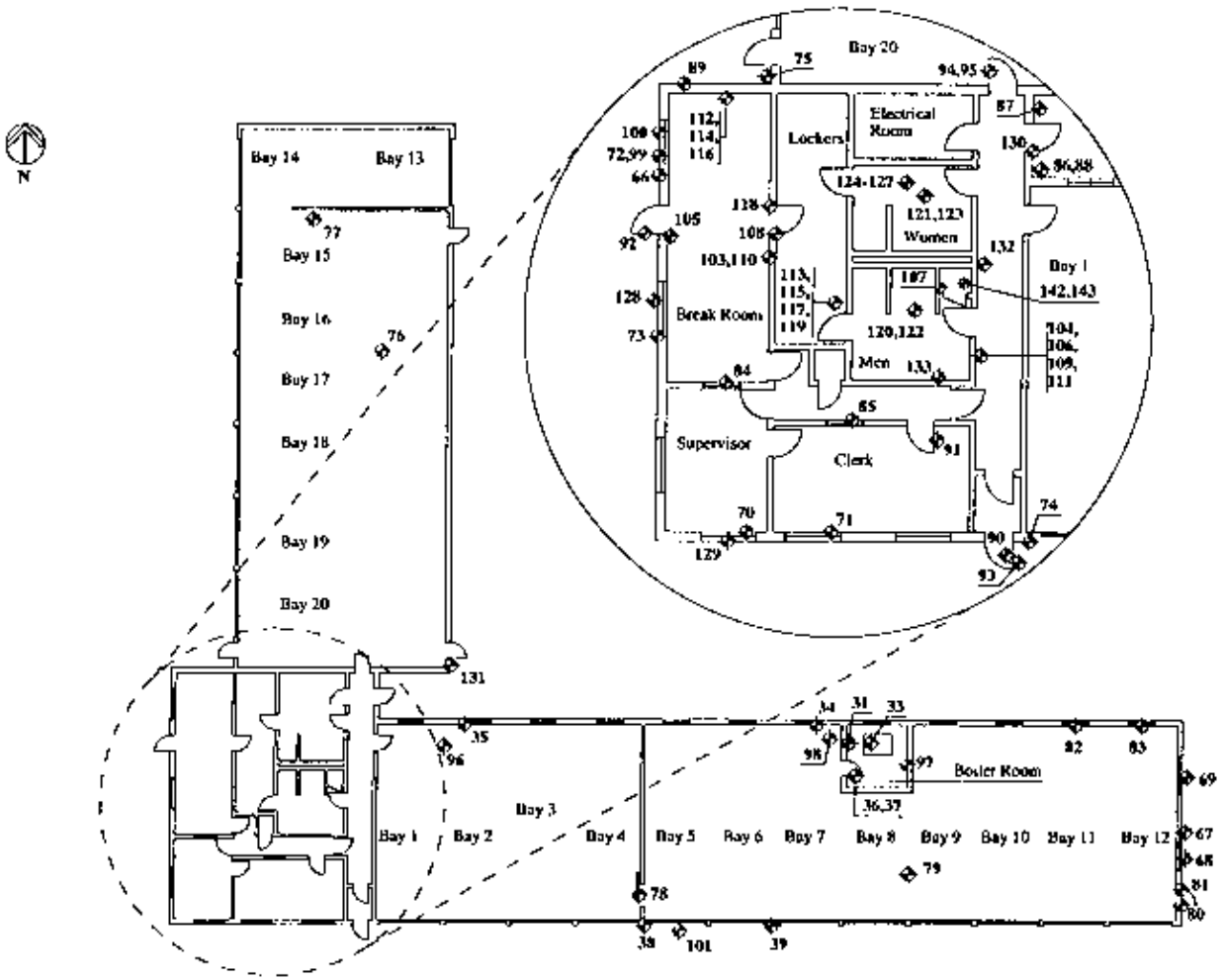
Additional Notes

1. The possibility exists that suspect asbestos containing materials may be located behind walls, under fixed flooring or above fixed ceilings. During renovation/demolition activities, upon the penetration or demolition of a fixed wall or ceiling, should any suspect materials be seen or become accessible, all activities shall cease and the materials shall be sampled by a licensed inspector to determine the presence of asbestos.

2. EnviroMed strongly recommends the use of Transmission Electron Microscopy (TEM) on vinyl floor tiles in cases where both the vinyl floor tile and flooring mastic were found to contain 1% or less asbestos using Polarized Light Microscopy (PLM). PLM has been found to give "false negative" results on floor tile samples due to the fact that the asbestos fibers are tightly bound into the matrix of the floor tile. As a result the asbestos cannot be easily detected using PLM. The use of the TEM analytical method will definitively determine whether or not the floor tile contains legally significant amounts of asbestos.

3. This inspection report shall not be used as a scope of work for asbestos abatement. The asbestos design specifications prepared by a licensed asbestos project designer shall only be utilized for the asbestos abatement.

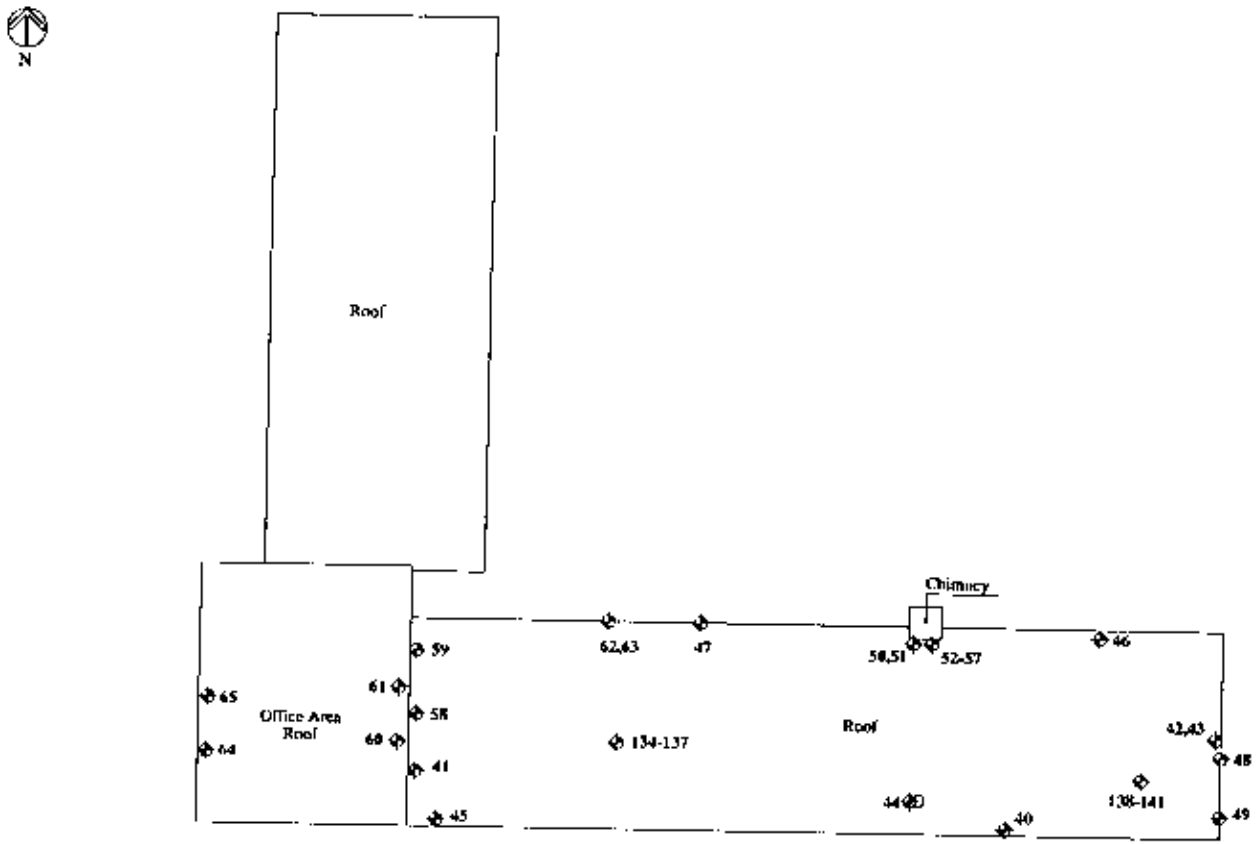
II. BULK SAMPLE LOCATION DIAGRAMS



Legend :

◈ = Sample Number & Location

Drawing Title: **Asbestos Bulk Sample Location Diagram**	
Prepared by: EnviroMed Services, Inc. 25 Science Park, New Haven, CT 06511	Date: 07/16/01
Project: **D.O.T. Maintenance Garage Bldg # 81-169** **Floor Plan** Windsor, Connecticut	Scale: N.T.S. Drawn By: B.V.
Prepared for : State of Connecticut Department of Transportation Newington, Connecticut	Approved By: T.H. Drawing No. 1 of 3
ISMS # III 01-508	

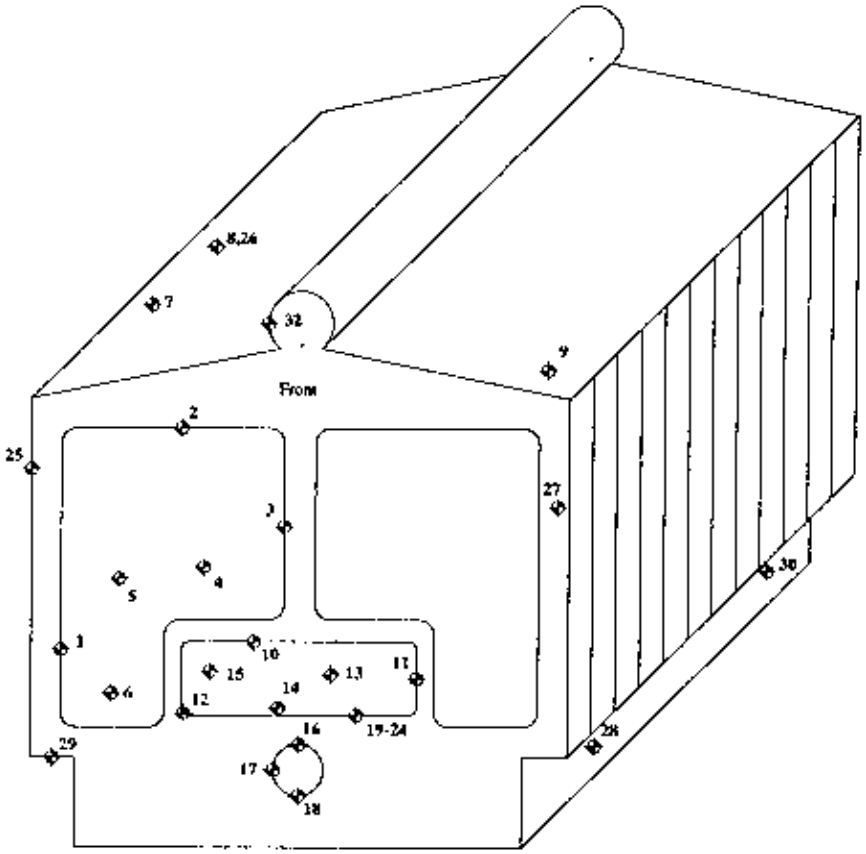


Legend :

◈ = Sample Number & Location

○ = Roof Vent

Drawing Title: **Asbestos Bulk Sample Location Diagram**	
Prepared by: EnviroMed Services, Inc. 25 Science Park, New Haven, CT 06511	Date: 07/16/01
Project: **D.O.T. Maintenance Garage Bldg # 81-169** **Roof Plan** Windsor, Connecticut	Scale: N.T.S.
	Drawn By: B.V.
Prepared for : State of Connecticut Department of Transportation Newington, Connecticut	Approved By: T.H.
EMS # 01-01-548	Drawing No 2 of 3



Legend :

◆ = Sample Number & Location

Drawing Title: **Asbestos Bulk Sample Location Diagram**	
Prepared by: EnviroMed Services, Inc. 25 Science Park, New Haven, CT 06511	Date: 07/16/01
Project: D.O.T. Maintenance Garage Bldg # 81-169 Boiler Unit - Front View Windsor, Connecticut	Scale: N.T.S. Drawn By: B.V.
Prepared for : State of Connecticut Department of Transportation Newington, Connecticut	Approved By: T.H.
EMS # 01-548	Drawing No. 3 of 3

III. SAMPLE LOG AND RESULTS TABLE

Sample Number	Location	Material Sampled	Percent Asbestos
1	boiler room boiler	clean-out door rope gasket	NAD
2	boiler room boiler	clean-out door rope gasket	NAD
3	boiler room boiler	clean-out door rope gasket	NAD
4	boiler room boiler	clean-out door insulation	NAD
5	boiler room boiler	clean-out door insulation	NAD
6	boiler room boiler	clean-out door insulation	NAD
7	boiler room boiler	boiler rib insulation	5
8	boiler room boiler	boiler rib insulation	7
9	boiler room boiler	boiler rib insulation	7
10	boiler room boiler	sight door gasket	NAD
11	boiler room boiler	sight door gasket	NAD
12	boiler room boiler	sight door gasket	NAD
13	boiler room boiler	sight door insulation	NAD
14	boiler room boiler	sight door insulation	NAD
15	boiler room boiler	sight door insulation	NAD
16	boiler room boiler	burner gasket	NAD
17	boiler room boiler	burner gasket	NAD
18	boiler room boiler	burner gasket	NAD
19	boiler room boiler	refractory cement	NAD
20	boiler room boiler	refractory cement	NAD
21	boiler room boiler	refractory cement	NAD
22	boiler room boiler	refractory brick	NAD
23	boiler room boiler	refractory brick	NAD

NAD - No Asbestos Detected

Sample Number	Location	Material Sampled	Percent Asbestos
24	boiler room boiler	refractory brick	NAD
25	boiler room boiler	boiler blanket insulation white	NAD
26	boiler room boiler	boiler blanket insulation white	NAD
27	boiler room boiler	boiler blanket insulation white	NAD
28	boiler room boiler	rib cement gray	15
29	boiler room boiler	rib cement gray	15
30	boiler room boiler	rib cement gray	15
31	boiler room	paper wrap on fiberglass pipe insulation	NAD
32	boiler room	paper wrap on fiberglass pipe insulation	NAD
33	boiler room	paper wrap on fiberglass pipe insulation	NAD
34	bay # 7	interior window sealant	<1
35	bay # 2	interior window sealant	<1
36	boiler room	fire door insulation	80
37	boiler room	fire door insulation	80
38	exterior bay # 5	overhead door sealant	NAD
39	exterior bay # 6	overhead door sealant	NAD
40	roof	parapet coping joint sealant gray/beige	3
41	roof	parapet coping joint sealant gray/beige	3
42	roof	silver painted flashing paper first layer	2
43	roof	silver painted flashing paper second layer	10
44	roof	flashing cement black	NAD
45	roof	flashing cement black	20
46	roof	down spout sealant	NAD
47	roof	down spout sealant	NAD
48	roof	patching cement gray	30
49	roof	patching cement gray	20

NAD - No Asbestos Detected

Sample Number	Location	Material Sampled	Percent Asbestos
50	roof	silver painted flashing paper first layer	2
51	roof	silver painted flashing paper second layer	5
52	roof	chimney flashing sealant white	NAD
53	roof	chimney flashing sealant white	NAD
54	roof	chimney flashing sealant gray/beige	NAD
55	roof	chimney flashing sealant gray/beige	NAD
56	roof	chimney flashing sealant brown	NAD
57	roof	chimney flashing sealant brown	NAD
58	roof	coping sealant white	NAD
59	roof	coping sealant white	NAD
60	roof	black flashing sealant	NAD
61	roof	black flashing sealant	NAD
62	roof	edge flashing	3
63	roof	edge flashing	5
64	roof	black gutter sealant	NAD
65	roof	black gutter sealant	NAD
66	exterior break room	exterior window frame sealant type I	NAD
67	exterior bay # 12	exterior window frame sealant type I	NAD
68	exterior bay # 12	exterior window frame sealant type II - gray	<1
69	exterior bay # 12	exterior window frame sealant type II - gray	<1
70	supervisor's office	interior window sill sealant	NAD
71	clerk's office	interior window sill sealant	NAD
72	exterior break room	exterior wall unit sealant	NAD
73	exterior break room	exterior wall unit sealant	NAD
74	exterior bay # 1	wall expansion joint sealant	NAD
75	exterior bay # 20	wall expansion joint sealant	NAD

NAD - No Asbestos Detected

Sample Number	Location	Material Sampled	Percent Asbestos
76	between bays # 16 & 17	floor expansion joint type II	NAD
77	wash bay	floor expansion joint type II	NAD
78	bay # 4	floor expansion joint type I	NAD
79	bay # 8	floor expansion joint type I	NAD
80	exterior bay # 12	exterior door frame sealant pink/white	NAD
81	exterior bay # 12	exterior door frame sealant pink/white	NAD
82	bay # 11	interior window frame sealant gray	NAD
83	bay # 12	interior window frame sealant gray	NAD
84	break room	interior window glazing	3
85	clerk's office hallway	interior window glazing	3
86	exterior bay # 1	concrete slab sealant	NAD
87	exterior bay # 20	concrete slab sealant	NAD
88	exterior - bay # 1 wall/foundation interface	black flashing	NAD
89	exterior - break room wall/foundation interface	black flashing	NAD
90	hallway	door window glazing on type II door	NAD
91	clerk's office	door window glazing on type II door	NA
92	break room	door window glazing on type II door	NAD
93	hallway	door window glazing on type II door	NAD
94	bay # 20	gray door window glazing on type V door	NAD
95	bay # 20	gray door window glazing on type V door	NAD
96	bay # 2	black foam insulation	NAD
97	boiler room	black foam insulation	NAD
98	bay # 7	black foam insulation	NAD
99	exterior break room	black flashing paper around wall unit	NAD
100	exterior break room	black flashing paper around wall unit	NAD
101	exterior bay # 5	overhead door light sealant type I	NAD

NAD - No Asbestos Detected

Sample Number	Location	Material Sampled	Percent Asbestos
102	exterior bay # 4	overhead door light sealant type I	NAD
103	break room	wallboard	NAD
104	hallway	wallboard	NAD
105	break room	wallboard joint compound	NAD
106	hallway	wallboard joint compound	NAD
107	men's room closet	wallboard joint compound	NAD
108	break room	wallboard joint tape	NAD
109	hallway	wallboard joint tape	NAD
110	break room	2'x4' suspended ceiling tile-type I "worms and pinholes" pattern	NAD
111	hallway	2'x4' suspended ceiling tile-type I "worms and pinholes" pattern	NAD
112	break room	12" salmon vinyl floor tile	NAD
113	locker room	12" salmon vinyl floor tile	NAD
114	break room	black mastic under 12" salmon vinyl floor tile	NAD
115	locker room	black mastic under 12" salmon vinyl floor tile	NAD
116	break room	4" brown cove molding	NAD
117	locker room	4" brown cove molding	NAD
118	break room	glue behind 4" brown cove molding	NAD
119	locker room	glue behind 4" brown cove molding	NAD
120	men's room	2'x4' suspended ceiling tile type II - gypsum matrix	NAD
121	ladies room	2'x4' suspended ceiling tile type II - gypsum matrix	NAD
122	men's room	2'x4' suspended ceiling tile type III - vinyl covering	NAD
123	ladies room	2'x4' suspended ceiling tile type III - vinyl covering	NAD
124	ladies room	2'x4' suspended ceiling tile type IV - white vinyl and foil	NAD
125	ladies room	2'x4' suspended ceiling tile type IV - white vinyl and foil	NAD
126	ladies room	2'x4' suspended ceiling tile type V - brown matrix	NAD
127	ladies room	2'x4' suspended ceiling tile type V - brown matrix	NAD

NAD - No Asbestos Detected

Sample Number	Location	Material Sampled	Percent Asbestos
128	exterior break room	aluminum sash gasket	NAD
129	exterior supervisor's office	aluminum sash gasket	NAD
130	exterior bay # 1	exterior door frame sealant	NAD
131	exterior bay # 20	exterior door frame sealant	NAD
132	hallway	sink/drinking fountain sealant	NAD
133	men's room	sink/drinking fountain sealant	NAD
134	roof	built-up roofing top layer - felt paper	NAD
135	roof	built-up roofing second layer - felt paper	NAD
136	roof	built-up roofing third layer - felt paper	NAD
137	roof	built-up roofing bottom layer - vapor barrier	NAD
138	roof	built-up roofing top layer - felt paper	NAD
139	roof	built-up roofing second layer - felt paper	NAD
140	roof	built-up roofing third layer - felt paper	NAD
141	roof	built-up roofing bottom layer - vapor barrier	NAD
142	men's room closet hot water tank panel box	paper insulation	NAD
143	men's room closet hot water tank panel box	paper insulation	NAD

NAD - No Asbestos Detected

IV. LABORATORY ANALYSIS SHEETS

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LA TESTING

Attn.: Thomas Nell
EnviroMed Services, Inc.
25 Science Park
New Haven, CT 06511

Saturday, August 11, 2001

Ref Number: PS013266

POLARIZED LIGHT MICROSCOPY (PLM)

Performed by EPA 600/R-93/116 Method*

Project: Winsor Road Maintenance Garage

Sample	Location	Appearance	Sample Treatment	ASBESTOS % Type	NON-ASBESTOS % Fibrous % Non-Fibrous
1		Yellow/White Fibrous Homogeneous	Teased	None Detected	100% Glass
2		White Fibrous Homogeneous	Teased	None Detected	100% Glass
3		White Fibrous Homogeneous	Teased	None Detected	100% Glass
4		Brown Fibrous Homogeneous	Teased	None Detected	80% Glass 20% Min. Wool
5		White Fibrous Homogeneous	Teased	None Detected	20% Min. Wool 80% Glass
6		White Fibrous Homogeneous	Teased	None Detected	80% Glass 20% Min. Wool

Comments: For all obviously heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. Also, "# of Layers" refere to number of separable subsamples.

* NY samples analyzed by ELAP 198.1 Method

David Ralbovsky
Analyst

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Performed by EPA 600/R-93/116 Method*

Project: Winsor Road Maintenance Garage

Sample	Location	Appearance	Sample Treatment	ASBESTOS % Type	NON-ASBESTOS % Fibrous	% Non-Fibrous
7		Rust Fibrous Homogeneous	Teased	5% Chrysotile	65% Glass 20% Min. Wool	10% Matrix
8		Rust/Grey Fibrous Homogeneous	Teased	7% Chrysotile	63% Glass 25% Min. Wool	5% Matrix
9		Rust/Grey Fibrous Homogeneous	Teased	7% Chrysotile	63% Glass 25% Min. Wool	5% Matrix
10		White Fibrous Homogeneous	Teased	None Detected	85% Glass 15% Min. Wool	
11		White Fibrous Homogeneous	Teased	None Detected	90% Glass 10% Min. Wool	
12		White Fibrous Homogeneous	Teased	None Detected	90% Glass 10% Min. Wool	

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* NY samples analyzed by Elap 198.1 Method

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Performed by EPA 600/R-93/116 Method*

Project: Winsor Road Maintenance Garage

Sample	Location	Appearance	Sample Treatment	ASBESTOS % Type	NON-ASBESTOS % Fibrous	% Non-Fibrous
13		Yellow Fibrous Homogeneous	Teased	None Detected	60% Glass 40% Min. Wool	
14		Red/White Fibrous Homogeneous	Teased	None Detected	60% Glass 40% Min. Wool	
15		White Fibrous Homogeneous	Teased	None Detected	80% Glass 20% Min. Wool	
16		Grey Fibrous Homogeneous	Teased	None Detected	70% Cellulose 25% Min. Wool	5% Matrix
17		Grey Fibrous Homogeneous	Teased	None Detected	70% Cellulose 25% Min. Wool	5% Matrix
18		Grey Fibrous Homogeneous	Teased	None Detected	70% Cellulose 25% Min. Wool	5% Matrix

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Performed by EPA 600/R-93/116 Method*

Project: Winsor Road Maintenance Garage

Sample	Location	Appearance	Sample Treatment	ASBESTOS % Type	NON-ASBESTOS % Fibrous	% Non-Fibrous
19		White Non-Fibrous Homogeneous	Crushed/Dissolved	None Detected	5% Other	35% Quartz 60% Matrix
20		Red/White Non-Fibrous Homogeneous	Crushed/Dissolved	None Detected	5% Other	35% Quartz 60% Matrix
21		Red/White Fibrous Homogeneous	Crushed/Dissolved	None Detected	5% Other	35% Quartz 60% Matrix
22		Rust Non-Fibrous Homogeneous	Crushed/Dissolved	None Detected	5% Other	85% Matrix 10% Quartz
23		Rust/White Non-Fibrous Homogeneous	Crushed/Teased	None Detected	5% Other	10% Quartz 85% Matrix
24		Rust/White Non-Fibrous Homogeneous	Crushed/Teased	None Detected	5% Other	10% Quartz 85% Matrix

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Project: Winsor Road Maintenance Garage

Sample	Location	Appearance	Sample Treatment	ASBESTOS % Type	NON-ASBESTOS % Fibrous	% Non-Fibrous
25		White Fibrous Homogeneous	Teased	None Detected	90% Glass 10% Min. Wool	
26		White Fibrous Homogeneous	Teased	None Detected	90% Glass 10% Min. Wool	
27		White Fibrous Homogeneous	Teased	None Detected	90% Glass 10% Min. Wool	
28		Grey/Rust Non-Fibrous Homogeneous	Crushed/Teased	15% Chrysotile	None Detected	85% Matrix
29		Grey/Rust Non-Fibrous Homogeneous	Crushed/Teased	15% Chrysotile	None Detected	85% Matrix
30		Grey/Rust Non-Fibrous Homogeneous	Crushed/Teased	15% Chrysotile	None Detected	85% Matrix

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Project: Winsor Road Maintenance Garage

Sample	Location	Appearance	Sample Treatment	ASBESTOS % Type	NON-ASBESTOS % Fibrous	% Non-Fibrous
31		Silver/White Fibrous Homogeneous	Teased	None Detected	50% Cellulose	50% Other
32		Silver/White Fibrous Homogeneous	Teased	None Detected	50% Cellulose	50% Other
33		Silver/White Fibrous Homogeneous	Teased	None Detected	50% Cellulose	50% Other
34		Grey/Brown Non-Fibrous Homogeneous	Dissolved	< 1% Chrysotile	None Detected	40% Ca Carbonate 60% Matrix
35		Grey/Brown Non-Fibrous Homogeneous	Dissolved	< 1% Chrysotile	None Detected	40% Ca Carbonate 60% Matrix
36		Gray/White Fibrous Homogeneous	Teased	80% Chrysotile	None Detected	20% Matrix

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Disclaimer: PLM has been known to miss detection in a small percentage of samples which contain asbestos. Thus negative PLM results cannot be guaranteed. LA Testing suggests that samples reported as <1% or none detected be tested with either SEM or TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval by LA Testing. The above test must not be used by the client to claim product endorsement by NVLAP nor any agency of the United States Government. Laboratory is not responsible for the accuracy of results when requested to physically separate and analyze layered samples.

Analysis performed by LA Testing, Inc. (NVLAP Air and Bulk #200232-0, State: CA 2293, AZ AZ0521, TX 43389)

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Saturday, August 11, 2001

Ref Number: PS013266

POLARIZED LIGHT MICROSCOPY (PLM)

Performed by EPA 600/R-93/116 Method*

Project: Winsor Road Maintenance Garage

Sample	Location	Appearance	Sample Treatment	ASBESTOS % Type	NON-ASBESTOS % Fibrous	% Non-Fibrous
37		White/Grey Fibrous Homogeneous	Teased	80% Chrysotile	None Detected	20% Matrix
38		Brown Non-Fibrous Homogeneous	Ashed	None Detected	None Detected	100% Other
39		Brown Non-Fibrous Homogeneous	Ashed	None Detected	None Detected	100% Other
40		Grey/Brown Non-Fibrous Homogeneous	Dissolved	3% Chrysotile	7% Cellulose	60% Ca Carbonate 30% Matrix
41		Grey/Brown Non-Fibrous Homogeneous	Dissolved	3% Chrysotile	7% Cellulose	60% Ca Carbonate 30% Matrix
42		Silver/Black Fibrous Homogeneous	Dissolved	2% Chrysotile	15% Glass	83% Matrix

Comments: For all obviously heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. Also, "# of Layers" refers to number of separable subsamples.

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Analysis performed by LA Testing, Inc. (NVLAP Air and Bulk #200232-0, State: CA 2282, AZ AZ0921, TX 43369)

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POLARIZED LIGHT MICROSCOPY (PLM)

Performed by EPA 600/R-93/116 Method*

Project: Winsor Road Maintenance Garage

Sample	Location	Appearance	Sample Treatment	ASBESTOS % Type	NON-ASBESTOS % Fibrous	% Non-Fibrous
43		Black Fibrous Homogeneous	Teased/Dissolved	10% Chrysotile	None Detected	90% Matrix
44		Black Non-Fibrous Homogeneous	Dissolved	None Detected	None Detected	100% Other
45		Black Non-Fibrous Homogeneous	Dissolved	20% Chrysotile	None Detected	80% Matrix
46		Grey Non-Fibrous Homogeneous	Ashed	None Detected	None Detected	100% Other
47		Grey Non-Fibrous Homogeneous	Ashed	None Detected	None Detected	100% Other
48		Black Fibrous Homogeneous	Ashed	30% Chrysotile	None Detected	70% Matrix

Comments: For all obviously heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. Also, "# of Layers" refers to number of separable subsamples.
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Sample	Location	Appearance	Sample Treatment	ASBESTOS % Type	NON-ASBESTOS % Fibrous	% Non-Fibrous
49		Black Non-Fibrous Homogeneous	Dissolved	20% Chrysotile	None Detected	80% Matrix
50		Black Fibrous Homogeneous	Teased/Dissolved	2% Chrysotile	8% Wollastonite 15% Glass	75% Matrix
51		Black Fibrous Homogeneous	Teased/Dissolved	5% Chrysotile	20% Glass	75% Matrix
52		White Non-Fibrous Homogeneous	Ashed	None Detected	None Detected	60% Ca Carbonate 40% Matrix
53		White Non-Fibrous Homogeneous	Ashed	None Detected	None Detected	60% Ca Carbonate 40% Matrix
54		Beige/Grey Non-Fibrous Homogeneous	Dissolved	None Detected	None Detected	100% Other

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POLARIZED LIGHT MICROSCOPY (PLM)

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Project: Winsor Road Maintenance Garage

Sample	Location	Appearance	Sample Treatment	ASBESTOS %	ASBESTOS Type	NON-ASBESTOS %	NON-ASBESTOS Fibrous	NON-ASBESTOS %	NON-ASBESTOS Non-Fibrous
55		Grey/Beige Non-Fibrous Homogeneous	Crushed/Teased	None Detected		None Detected		100%	Other
56		Clear/Brown Non-Fibrous Homogeneous	Ashed	None Detected		None Detected		100%	Other
57		Clear/Brown Non-Fibrous Homogeneous	Ashed	None Detected		None Detected		100%	Other
58		White Non-Fibrous Homogeneous	Dissolved	None Detected		None Detected		100%	Other
59		White Non-Fibrous Homogeneous	Dissolved	None Detected		None Detected		100%	Other
60		Black Non-Fibrous Homogeneous	Dissolved	None Detected		None Detected		100%	Other

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Project: Winsor Road Maintenance Garage

Sample	Location	Appearance	Sample Treatment	ASBESTOS % Type	NON-ASBESTOS % Fibrous	% Non-Fibrous
61		Black Non-Fibrous Homogeneous	Dissolved	None Detected	None Detected	100% Other
62		Black Fibrous Homogeneous	Dissolved	3% Chrysotile	10% Glass	87% Matrix
63		Black Fibrous Homogeneous	Dissolved	5% Chrysotile	10% Glass	85% Matrix
64		Grey/Black Non-Fibrous Homogeneous	Dissolved	None Detected	None Detected	100% Other
65		Grey/Black Non-Fibrous Homogeneous	Dissolved	None Detected	None Detected	100% Other
66		Grey Non-Fibrous Homogeneous	Ashed	None Detected	None Detected	100% Other

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Project: Winsor Road Maintenance Garage

Sample	Location	Appearance	Sample Treatment	ASBESTOS % Type	NON-ASBESTOS % Fibrous	% Non-Fibrous
67		Grey Non-Fibrous Homogeneous	Dissolved	None Detected	None Detected	100% Other
68		Grey Non-Fibrous Homogeneous	Dissolved	< 1% Chrysotile	None Detected	60% Ca Carbonate 40% Matrix
69		Grey Non-Fibrous Homogeneous	Dissolved	< 1% Chrysotile	None Detected	60% Ca Carbonate 40% Matrix
70		White Non-Fibrous Homogeneous	Dissolved	None Detected	None Detected	100% Other
71		White Non-Fibrous Homogeneous	Dissolved	None Detected	None Detected	100% Other
72		Clear Non-Fibrous Homogeneous	Dissolved	None Detected	None Detected	100% Other

Comments: For all obviously heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. Also, "# of Layers" refers to number of separable subsamples.

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Project: Winsor Road Maintenance Garage

Sample	Location	Appearance	Sample Treatment	ASBESTOS % Type	NON-ASBESTOS % Fibrous	% Non-Fibrous
73		Clear Non-Fibrous Homogeneous	Dissolved	None Detected	None Detected	100% Other
74		Grey/White Non-Fibrous Homogeneous	Dissolved	None Detected	10% Other	90% Other
75		White Non-Fibrous Homogeneous	Dissolved	None Detected	10% Other	90% Other
76		Grey Non-Fibrous Homogeneous	Dissolved	None Detected	None Detected	100% Other
77		Grey Non-Fibrous Homogeneous	Dissolved	None Detected	None Detected	100% Other
78		Black Fibrous Homogeneous	Teased/Dissolved	None Detected	20% Glass	80% Matrix

Comments: For all obviously heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. Also, "# of Layers" refers to number of separable subsamples.

* NY samples analyzed by ELAP 198.1 Method.

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Project: Winsor Road Maintenance Garage

Sample	Location	Appearance	Sample Treatment	ASBESTOS % Type	NON-ASBESTOS % Fibrous	% Non-Fibrous
79		Black Fibrous Homogeneous	Dissolved	None Detected	20% Glass	80% Matrix
80		Pink/White Non-Fibrous Homogeneous	Dissolved	None Detected	None Detected	100% Other
81		Pink/White Non-Fibrous Homogeneous	Dissolved	None Detected	None Detected	100% Other
82		White/Gray Non-Fibrous Homogeneous	Dissolved	None Detected	None Detected	100% Other
83		Grey/Black Non-Fibrous Homogeneous	Dissolved	None Detected	7% Cellulose	93% Other
4		Black Non-Fibrous Homogeneous	Dissolved	3% Chrysotile	7% Cellulose	90% Matrix

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IY samples analyzed by ELAP 198.1 Method.

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Saturday, August 11, 2001

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POLARIZED LIGHT MICROSCOPY (PLM)

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Project: Winsor Road Maintenance Garage

Sample	Location	Appearance	Sample Treatment	ASBESTOS % Type	NON-ASBESTOS % Fibrous	% Non-Fibrous
85		Black Non-Fibrous Homogeneous	Dissolved	3% Chrysotile	7% Cellulose	90% Matrix
86		Grey Non-Fibrous Homogeneous	Dissolved	None Detected	None Detected	100% Other
87		Grey Non-Fibrous Homogeneous	Dissolved	None Detected	None Detected	100% Other
88		Black Fibrous Homogeneous	Dissolved	None Detected	30% Glass	70% Matrix
89		Black Fibrous Homogeneous	Dissolved	None Detected	30% Glass	70% Matrix
90		Black Non-Fibrous Homogeneous	Ashed	None Detected	None Detected	100% Other

Comments: For all obviously heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. Also, "# of Layers" refers to number of separable subsamples.

NY samples analyzed by ELAP 198.1 Method

David Ralbovsky
Analyst

Approved
Signatory

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LA TESTING

Attn.: Thomas Nell
EnviroMed Services, Inc.
25 Science Park
New Haven, CT 06511

Saturday, August 11, 2001

Ref Number: PS013266

POLARIZED LIGHT MICROSCOPY (PLM)

Performed by EPA 600/R-93/116 Method*

Project: Winsor Road Maintenance Garage

Sample	Location	Appearance	Sample Treatment	ASBESTOS %	ASBESTOS Type	NON-ASBESTOS %	NON-ASBESTOS Fibrous	NON-ASBESTOS %	NON-ASBESTOS Non-Fibrous
91				Not Submitted					
92		Black Non-Fibrous Homogeneous	Dissolved	None Detected		None Detected		100%	Other
93		Black Non-Fibrous Homogeneous	Dissolved	None Detected		None Detected		100%	Other
94		Grey Non-Fibrous Homogeneous	Dissolved	None Detected		10%	Wollastonite	90%	Matrix
95		Grey Non-Fibrous Homogeneous	Dissolved	None Detected		10%	Wollastonite	90%	Matrix
96		Black Non-Fibrous Homogeneous	Ashed	None Detected		None Detected		100%	Other

Comments: For all obviously heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. Also, "# of Layers" refers to number of separable subsamples.

* NY samples analyzed by ELAP 198.1 Method

David Ralbovsky
Analyst

Approved
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Analysis performed by LA Testing Inc. (NVLAP Air and Bulk #200232-0, State: CA 2283, AZ AZ0821, TX 43369)

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Saturday, August 11, 2001

Ref Number: PS013266

POLARIZED LIGHT MICROSCOPY (PLM)

Performed by EPA 600/R-93/116 Method*

Project: Winsor Road Maintenance Garage

Sample	Location	Appearance	Sample Treatment	ASBESTOS % Type	NON-ASBESTOS % Fibrous	% Non-Fibrous
97		Black Non-Fibrous Homogeneous	Ashed	None Detected	None Detected	100% Other
98		Black Non-Fibrous Homogeneous	Ashed	None Detected	None Detected	100% Other
99		Black Fibrous Homogeneous	Teased	None Detected	50% Glass	50% Matrix
100		Black Fibrous Homogeneous	Teased/Dissolved	None Detected	10% Glass	90% Matrix
101		Brown Non-Fibrous Homogeneous	Teased	None Detected	None Detected	100% Other
102		Brown Non-Fibrous Homogeneous	Ashed	None Detected	None Detected	100% Other

Comments: For all obviously heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. Also, "# of Layers" refers to number of separable subsamples.

* NY samples analyzed by ELAP 198.1 Method

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Saturday, August 11, 2001

Ref Number: PS013266

POLARIZED LIGHT MICROSCOPY (PLM)

Performed by EPA 600/R-93/116 Method*

Project: Winsor Road Maintenance Garage

Sample	Location	Appearance	Sample Treatment	ASBESTOS % Type	NON-ASBESTOS % Fibrous	% Non-Fibrous
103		Brown/Grey Fibrous Homogeneous	Teased	None Detected	18% Cellulose 2% Glass	70% Gypsum 10% Other
104		Brown/Grey Fibrous Homogeneous	Teased	None Detected	18% Cellulose 2% Glass	70% Gypsum 10% Other
105		White Non-Fibrous Homogeneous	Dissolved/Teased	None Detected	7% Cellulose	50% Quartz 20% Ca Carbonate 23% Other
106		White Non-Fibrous Homogeneous	Crushed/Dissolved	None Detected	7% Cellulose	50% Quartz 20% Ca Carbonate 23% Other
107		White Non-Fibrous Homogeneous	Crushed/Dissolved	None Detected	7% Cellulose	50% Quartz 20% Ca Carbonate 23% Other
108		White Fibrous Homogeneous	Teased	None Detected	99% Cellulose	1% Other

Comments: For all obviously heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. Also, "# of Layers" refers to number of separable subsamples.
* NY samples analyzed by ELAP 198.1 Method.

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Saturday, August 11, 2001

Ref Number: PS013266

POLARIZED LIGHT MICROSCOPY (PLM)

Performed by EPA 600/R-93/116 Method*

Project: Winsor Road Maintenance Garage

Sample	Location	Appearance	Sample Treatment	ASBESTOS % Type	NON-ASBESTOS % Fibrous	% Non-Fibrous
109		White Fibrous Homogeneous	Teased	None Detected	99% Cellulose	1% Other
110		Grey Fibrous Homogeneous	Teased	None Detected	60% Cellulose 20% Glass	20% Perlite
111		White/Grey Fibrous Homogeneous	Teased	None Detected	60% Cellulose 20% Glass	20% Perlite
112		Peach Non-Fibrous Homogeneous	Dissolved	None Detected	None Detected	100% Other
113		Peach Non-Fibrous Homogeneous	Dissolved	None Detected	None Detected	100% Other
114		Black Non-Fibrous Homogeneous	Dissolved	None Detected	5% Cellulose	95% Matrix

Comments: For all obviously heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. Also, "# of Layers" refers to number of separable subsamples.

* NY samples analyzed by ELAP 198.1 Method.

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Saturday, August 11, 2001

Ref Number: PS013266

POLARIZED LIGHT MICROSCOPY (PLM)

Performed by EPA 600/R-93/116 Method*

Project: Winsor Road Maintenance Garage

Sample	Location	Appearance	Sample Treatment	ASBESTOS % Type	NON-ASBESTOS % Fibrous	% Non-Fibrous
115		Black Non-Fibrous Homogeneous	Dissolved	None Detected	5% Cellulose	95% Matrix
116		Black Non-Fibrous Homogeneous	Dissolved	None Detected	None Detected	100% Other
117		Black Non-Fibrous Homogeneous	Dissolved	None Detected	None Detected	100% Other
118		Yellow Non-Fibrous Homogeneous	Dissolved	None Detected	10% Cellulose	90% Matrix
119		Clear Non-Fibrous Homogeneous	Dissolved	None Detected	5% Cellulose	95% Matrix
120		Brown/White Fibrous Homogeneous	Teased	None Detected	18% Cellulose 2% Glass	70% Gypsum 10% Other

Comments: For all obviously heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. Also, "# of Layers" refers to number of separable subsamples.

* NY samples analyzed by ELAP 198.1 Method.

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Attn.: Thomas Neil
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25 Science Park
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Saturday, August 11, 2001

Ref Number: PS013286

POLARIZED LIGHT MICROSCOPY (PLM)

Performed by EPA 600/R-93/116 Method*

Project: Winsor Road Maintenance Garage

Sample	Location	Appearance	Sample Treatment	ASBESTOS % Type	NON-ASBESTOS % Fibrous	% Non-Fibrous
121		Brown/White Fibrous Homogeneous	Teased	None Detected	18% Cellulose 2% Glass	70% Gypsum 10% Other
122		White/Brown Fibrous Homogeneous	Teased	None Detected	50% Cellulose	50% Other
123		White/Brown Fibrous Homogeneous	Teased	None Detected	25% Cellulose	75% Other
124		White Fibrous Homogeneous	Teased	None Detected	40% Glass 10% Cellulose	50% Other
125		White Fibrous Homogeneous	Teased	None Detected	40% Glass 10% Cellulose	50% Other
126		Grey Fibrous Homogeneous	Teased	None Detected	50% Cellulose 10% Glass	40% Perlite

Comments: For all obviously heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. Also, "# of Layers" refers to number of separable subsamples.

* NY samples analyzed by ELAP 198.1 Method.

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Saturday, August 11, 2001

Ref Number: PS013266

POLARIZED LIGHT MICROSCOPY (PLM)

Performed by EPA 600/R-93/116 Method*

Project: Winsor Road Maintenance Garage

Sample	Location	Appearance	Sample Treatment	ASBESTOS % Type	NON-ASBESTOS % Fibrous	% Non-Fibrous
127		Grey Fibrous Homogeneous	Teased	None Detected	50% Cellulose 10% Glass	40% Perlite
128		Black Non-Fibrous Homogeneous	Dissolved	None Detected	None Detected	100% Other
129		Black Non-Fibrous Homogeneous	Dissolved	None Detected	None Detected	100% Other
130		Grey Non-Fibrous Homogeneous	Dissolved	None Detected	None Detected	100% Other
131		Grey Non-Fibrous Homogeneous	Ashed	None Detected	None Detected	100% Other
132		White Non-Fibrous Homogeneous	Ashed	None Detected	None Detected	100% Other

Comments: For all obviously heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. Also, "# of Layers" refers to number of separable subsamples.

* NY samples analyzed by ELAP 198.1 Method.

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LA TESTING

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25 Science Park
New Haven, CT 06511

Saturday, August 11, 2001

Ref Number: PS013266

POLARIZED LIGHT MICROSCOPY (PLM)

Performed by EPA 600/R-93/116 Method*

Project: Winsor Road Maintenance Garage

Sample	Location	Appearance	Sample Treatment	ASBESTOS % Type	NON-ASBESTOS % Fibrous	% Non-Fibrous
133		Clear Non-Fibrous Homogeneous	Ashed	None Detected	None Detected	100% Other
134		Black Fibrous Homogeneous	Teased	None Detected	20% Glass	80% Matrix
135		Black Fibrous Homogeneous	Teased/Teased	None Detected	5% Cellulose 20% Glass	75% Matrix
136		Black Fibrous Homogeneous	Teased	None Detected	7% Cellulose 13% Glass	80% Matrix
137		Black Fibrous Homogeneous	Dissolved	None Detected	10% Cellulose 10% Glass	80% Matrix
138		Black Fibrous Homogeneous	Teased	None Detected	20% Glass	80% Matrix

Comments: For all obviously heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. Also, "# of Layers" refers to number of separable subsamples.

* NY samples analyzed by ELAP 198.1 Method.

David Ralbovsky
Analyst

Approved
Signatory

Analysis performed by LA Testing, Inc. (NVLAP Air and Bulk #200232-0, State: CA 2283, AZ AZ0621, TX 43369)

2-Safety
2-R1

ENVIROMED SERVICES, INC.

Lead Inspection Report

for

Department of Transportation
Building #81-169
Windsor Maintenance Garage

Windsor, Connecticut

Client Project #: 581269

prepared for:

State of Connecticut
Department of Transportation
Hartford, Connecticut 06106

July 16, 2001
EnviroMed Project #: IH-01-548

25 Science Park•New Haven, CT 06511
(203) 786-5580 • facsimile (203) 786-5579

ENVIROMED SERVICES, INC.

Lead Inspection Report

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July 16, 2001
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TABLE OF CONTENTS

Section

I. INTRODUCTION

Introduction

Lead poisoning is a significant health hazard. High lead concentrations in the body can cause serious damage to the kidneys, the red blood cells, the central nervous system and the brain. One source of lead in the environment is lead-based paint. Leaded paint may contain up to 50% lead. Lead-based paint was widely used until it was banned in 1978.

Inspection Report

This inspection report consists of an introduction, project narrative, sample results table, sample results diagram and inspection data pages. Two reference pages are also included in the report. The cover page includes the project name and address.

The projective narrative is an explanation of what was found during the inspection. This includes where the samples were taken, and the results of each test. The type of substrate under the paint and the condition of the paint are explained in this summary.

The data pages include the results of each test. This includes the sample numbers, the type of test used and the results of each test. These results are given in milligrams per square centimeter (mg/cm^2). The data pages also include the condition of the paint, and the substrate surface type. The paint condition and surface types are explained in reference tables A and B.

A Niton XL-309 XRF Spectrum Analyzer was used during the inspection. This instrument measures a paint sample until a 95% confident reading of "positive" or "negative" versus the toxic level of lead which is 1.0 mg/cm2 as deemed by the State of Connecticut.

The XRF is calibrated at the beginning and the end of the day's inpections or at extended delays in testing and (at least) every four hours during inspections. If at any time the instrument does not calibrate according to the standardized sample and the instrument limit of detection the instrument is taken out of service.

II. PROJECT NARRATIVE

II. PROJECT NARRATIVE

Overview

On July 16, 2001 EnviroMed Services, Inc. performed a lead inspection using a direct read spectrum analyzer for the State of Connecticut Department of Transportation, at Building # 81-169 Windsor Maintenance Garage located in Windsor, Connecticut. The purpose of this inspection was to identify the presence of lead on the components prior to renovation/demolition.

The OSHA Lead in Construction Standard 29 CFR 1926.62 deems paint to be lead containing when any detectable lead is found. The State of Connecticut Lead Regulations deem paint to be a "toxic level" when X-Ray Fluorescence Analysis (XRF) exceeds 1.0 milligrams per centimeter squared (mg/cm^2), or 0.5% by weight in dry form. (19A-111-3). The State of Connecticut Department of Environmental Protection (DEP) regulations require building materials found to contain toxic levels of lead, to be Toxicity Characteristic Leaching Procedure (TCLP) tested for waste determination prior to disposal.

Summary of Results

XRF analysis was performed utilizing the Niton - XL 309 Spectrum Analyzer. Lead containing paint was found on building components. Please refer to the XRF Data Sheets for a list of all XRF results and the Sample Location Diagram for all sample locations. Toxic levels of lead were found on building components. Please refer to the XRF Toxic Level Sample Results Table for a list of toxic level XRF readings (greater than or equal to 1.0 mg/cm^2).

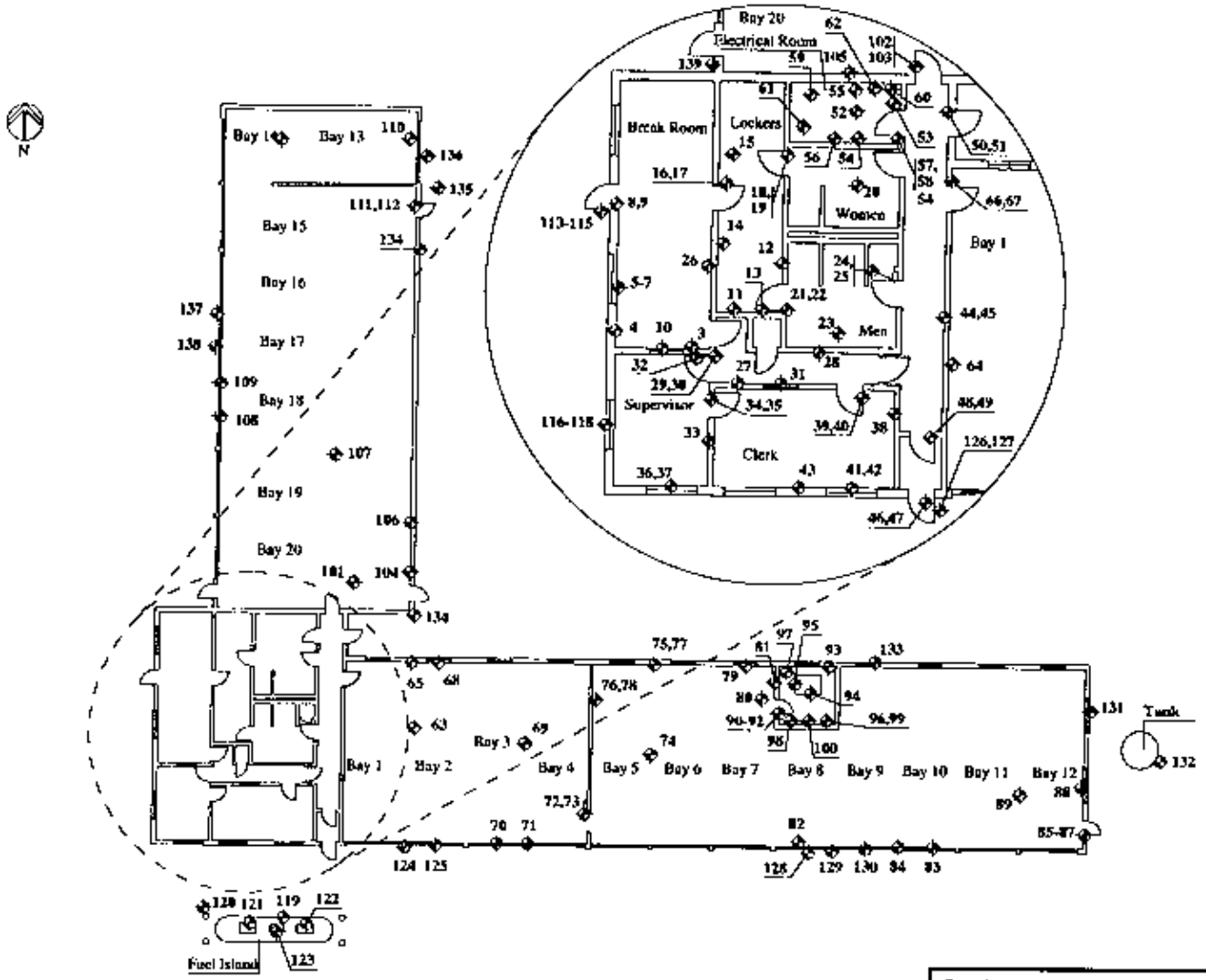
III. SAMPLE RESULTS TABLE

III. SUMMARY OF TOXIC LEVEL (≥ 1.0 mg/cm^2) XRF SAMPLE RESULTS

Summary of Toxic Level (≥1.0 mg/cm^2) Results

Sample Number	*Sample Location (mg/cm^2)*	*Component (s) Tested*	*Results*
3	Break Room	baseboard	2.6
11	Locker Room	baseboard	3.7
27	Hall #1	baseboard	2.8
32	Supervisor Office	baseboard	3.1
44	Hall #2	baseboard	2.7
69	Bays 1-4	I-Beam	1.2
72	Bays 1-4	fire door	19.0
81	Bays 5-12	breaker box	3.1
84	Bays 5-12	column	1.4
87	Bays 5-12	threshold	1.7
89	Bays 5-12	I-Beam	2.3
90	Boiler Room	door	3.0
91	Boiler Room	door casing	9.2
93	Boiler Room	wall	1.3
100	Boiler Room	wall	1.7
101	Bays 13-20	parking stripe	1.4
124	Exterior	corner post	10.0
129	Exterior	column	1.5

IV. SAMPLE LOCATION DIAGRAMS



Legend :

◈ = Sample Number & Location

Drawing Title: **Lead Sample Location Diagram**		
Prepared by: EnviroMed Services, Inc. 25 Science Park, New Haven, CT 06511		Date: 07/16/01
Project: **D.O.T. Maintenance Garage Bldg # 81-169** **Floor Plan** Windsor, Connecticut		Scale: N.T.S.
		Drawn By: B.V.
Prepared for : State of Connecticut Department of Transportation Newington, Connecticut		Approved By: J.F.
BMS # DH-01-348		Drawing No. 1 of 1

V. REFERENCE TABLE (S)

Lead Inspection Reference Table

B - Bulkhead
BB - Baseboard
CAB - Cabinet
CL - Ceiling
CM - Crown Molding
CR - Chair Rail
CW - Cellar Window
DC - Door Casing
DH - Door Header(Lintel)
DJ - Door Jamb
DR - Door
EC - Entrance Canopy
ECCL - Entrance Canopy Ceiling
EDR - Exterior Door
EWL - Exterior Wall
F - Foundation
FL - Floor
FP - Fireplace
KB - Kickboard
L - Lattice
LW - Lower Wall
NP - Stair Newel Post
P - Porch
PCL - Porch Ceiling
RD - Radiator
RLC - Railing Cap
S - Siding
SB - Stair Baluster
SBB - Stair Baseboard
SF - Shelf
SFS - Shelf Support
SR - Stair Riser
SRC - Stair Rail Cap
SS - Stair Stringer
ST - Stair Tread
SWL - Stair Walls
T - Trim
UW - Upper Wall
WA - Window Apron
WC - Window Casing
WD - Window
WES - Window Exterior Sill
WH - Window Header (Lintel)
WL - Wall
WM - Window Mullion
WSH - Window Sash
WSL - Window Sill
WSP - Window Stop
WW - Window Well

Note: Addition of the letter "E" prior to any component abbreviation will designate that component as an exterior surface (e.g. EWC = Exterior Window Casing)

Revised 6/93

Lead Inspection
Reference Table B
Surface Condition

0 - No painted windows/woodwork.

1 - All paint on windows/woodwork is intact.

2. - Some paint on windows/woodwork is peeling, cracking or flaking.

3. - Large amounts of paint on windows/woodwork is peeling, cracking, or flaking.

Lead Inspection
Reference Table B
Substrate Type

W - Wood

Pl - Plaster

M - Metal

Br - Brick

C - Concrete

Sh - Sheetrock/Drywall

VI. XRF DATA SHEETS

LEAD INSPECTION DATA PAGE

PROJECT NAME: Windsor Maintenance Garage

UNIT NUMBER: Bldg # 81-169

NO. DOORS: _____

NO. WINDOWS _____

SAMPLE NUMBER	RESULTS (Mg/cm2)	SURFACE TYPE	SUBSTRATE	CONDITION	COMMENT
1	–	NITON	Self Test	–	–
2	1.1	↓	Standard	–	Red
3	2.6	BB	Rubber	1	Brown +
4	0	Wall	WB	1	White
5	0.01	A/C	Met	1	Gray
6	0	Win	↓	1	Brown
7	0	WSL	Wood	1	stain
8	0	DR	Met	1	Gray
9	0.02	DC	↓	1	↓
10	0	WF	↓	1	↓
11	3.7	BB	Rubber	1	Brown +
12	0.02	Wall	CMU	1	White
13	0.01	↓	WB	1	↓
14	0	Locker	Met	1	Green
15	0.03	Bench Support	↓	1	Black
16	0	DR	↓	1	Gray
17	0.01	DC	↓	1	↓
18	0	DR	↓	1	↓
19	0.01	DC	↓	1	↓
20	0.04	Partition	↓	1	Pink

LEAD INSPECTION DATA PAGE

PROJECT NAME: Windsor Maintenance Garage NO. DOORS: _____

UNIT NUMBER: Bldg # 81-169 NO. WINDOWS _____

SAMPLE NUMBER	RESULTS (Mg/cm2)	SURFACE TYPE	SUBSTRATE	CONDITION	COMMENT
21	0	DR	Met	1	Gray
22	0.01	DC			↓
23	0.01	Partition		1	Tan
24	0	DR		1	Gray
25	0.01	DC	↓	1	↓
26	0.01	Bulletin Board	Wall Press Board	1	White
27	2.3	RB	Rubber	1	Brown +
28	0	Wall	WB	1	White
29	0	DR	Met	1	Gray
30	0	DC		1	
31	0	WF	↓	1	↓
32	3.1	BB	Rubber	1	Brown +
33	0.01	Wall	WB	1	White
34	0.01	DR	Met	1	Gray
35	0	DC		1	↓
36	-0.2	Wn	↓	1	Brown
37	0	WSL	Wood	1	↓
38	0	Wall	WB	1	White
39	0	DR	Met	1	Gray
40	0	DC	↓	1	↓

LEAD INSPECTION DATA PAGE

PROJECT NAME: Windsor Maintenance Garage NO. DOORS: _____

UNIT NUMBER: Bldg # 81-167 NO. WINDOWS 1

SAMPLE NUMBER	RESULTS (Mg/cm2)	SURFACE TYPE	SUBSTRATE	CONDITION	COMMENT
41	0	Win	Met	1	~~Door~~ Brown
42	0.05	WSL	Wood	1	↓
43	0	Panel	Wood	1	Black
44	2.7	BB	Rubber	1	Brown
45	0.01	Wall	WB	1	White
46	0	DR	Met	1	Gray
47	0	DC	↓	1	↓
48	0	DR	↓	1	↓
49	0	DC	↓	1	↓
50	0	DR	↓	1	↓
51	0.02	DC	↓	1	↓
52	0.03	Floor	Conc	2	↓
53	0	Wall	CMU	1	White
54	0	Panel	Wood	1	Black
55	0.03	Conduit	Met	1	↓
56	0	↓	↓	1	White
57	0	DR	↓	1	Gray
58	0	DC	↓	1	↓
59	0.04	Acl Board	↓	1	↓
60	0	Brick Bck	↓	1	↓

LEAD INSPECTION DATA PAGE

PROJECT NAME: Windsor Maintenance Garage NO. DOORS: _____

UNIT NUMBER: Bldg # 81-169 NO. WINDOWS _____

SAMPLE NUMBER	RESULTS (Mg/cm2)	SURFACE TYPE	SUBSTRATE	CONDITION	COMMENT
61	0.01	Joist	Met	1	Red
62	0.01	Transfer Switch Box	↓	1	Green
63	0.01	Parking Stripe	Conc	2	Yellow
64	0	Wall	Brick	1	Gray
65	0.02	Wall	↓	1	White
66	0	DR	Met	1	Brown
67	0.01	DC	↓	1	↓
68	0	Win	↓	1	↓
69	1.2	I Beam	↓	1	↓ +
70	0.02	Bay Door	↓	1	White
71	0.2	Bay Door Bracket	↓	1	↓
72	19.0	Fire Door	↓	1	Gray +
73	0.01	Fire Door Guide	↓	1	↓
74	0.01	Parking Stripe	Conc	2	Yellow
75	0.02	Wall	Brick	1	White
76	0.05	↓	CMU	1	↓
77	0.01	↓	Brick	1	Gray
78	0.10	↓	CMU	1	↓
79	0	Win	Met	1	Brown
80	0.03	Unit Heater	↓	1	Gray

LEAD INSPECTION DATA PAGE

PROJECT NAME: Wadsco Maintenance Garage NO. DOORS: _____

UNIT NUMBER: Bldg # 81-1609 NO. WINDOWS: _____

SAMPLE NUMBER	RESULTS (Mg/cm2)	SURFACE TYPE	SUBSTRATE	CONDITION	COMMENT
81	3.1	Breaker Box	Met	2	Gray +
82	0.02	Bay Door	↓	1	White
83	0.02	↓	↓	1	↓
84	1.4	Column	↓	1	White +
85	0.2	DR	↓	1	Brown
86	0.1	DC	↓	1	↓
87	1.7	Threshold	↓	1	Yellow +
88	0	I.V.	↓	1	Brown
89	2.3	I Beam	↓	1	↓ +
90	3.0	DR	Met	1	Brown +
91	9.2	DC	↓	1	↓ +
92	0.05	Threshold	Conc	2	Yellow
93	1.3	Wall	Brick	2	White +
94	0.02	Boiler Jacket	Met	1	Blue
95	0.08	Clean Out Door	↓	1	Silver
96	0.07	Pipe	↓	1	Black
97	0.02	Tank	↓	1	Red
98	0	Compressor	Met	1	Gray
99	0.01	Pump	↓	1	Green
100	1.7	Wall	CMU	1	White +

Page # 12

Building Rm

LEAD INSPECTION DATA PAGE

PROJECT NAME: Windsor Maintenance Garage NO. DOORS: _____

UNIT NUMBER: Bldg # 81-169 NO. WINDOWS 1

SAMPLE NUMBER	RESULTS (Mg/cm2)	SURFACE TYPE	SUBSTRATE	CONDITION	COMMENT
101	1.4	Parking Stripe	Conc	2	Yellow +
102	-0.7	DR	Met	1	Brown
103	0	DC	↓	1	↓
104	0.06	Wall	↓	1	Yellow
105	0	↓	CMU	1	↓
106	0.01	Column (I Beam)	Met	1	Gray
107	0.03	~~I Beam~~ Joist	↓	1	↓
108	0.01	Bay Door	↓	1	White
109	0.01	Column	↓	1	Gray
110	0.03	Bay Door	↓	1	White
111	0	DR	↓	1	Brown
112	0	DC	↓	1	↓
113	0.01	DR	Met	1	↓
114	0.02	DC	↓	1	↓
115	0	Threshold	Conc	2	Yellow
116	0	Win	Met	1	Brown
117	0	WSL	↓	1	↓
118	0.2	Little	↓	1	↓
119	0.01	Curb	↓	2	Yellow
120	0.05	Safety Post	↓	1	↓

LEAD INSPECTION DATA PAGE

PROJECT NAME: Hudson Maintenance Garage NO. DOORS: _____

UNIT NUMBER: Bldg # 81-169 NO. WINDOWS: _____

SAMPLE NUMBER	RESULTS (Mg/cm2)	SURFACE TYPE	SUBSTRATE	CONDITION	COMMENT
121	0.04	Pump	Met		Black
122	0.1	↓			Yellow
123	0	Air Pump			Red
124	10.0	Corner Post			Yellow +
125	0.11	Bay Door			Brown
126	0.1	DR			
127	0.1	DC			
128	0.01	Bay Pars			
129	1.5	Column			+
130	0.7	Lintle			
131	-0.3	Win			↓
132	0	Tank			Blue
133	0	Win			Brown
134	0.02	Siding			Beige
135	0.01	Safety Post			Yellow
136	0.01	Bay Door			Brown
137	0.05	Column			Beige
135	0.02	Bay Door			Brown
139	0.01	Siding	↓		Beige
140	1.0	Viton	Standard	-	Red

APPENDIX J

RELATED CORRESPONDENCE

Plimpton, Erik

From:	Strong, Michael J <Michael.Strong@ct.gov>
Sent:	Thursday, August 15, 2019 12:51 PM
To:	Plimpton, Erik; Vella, Cornato R.; Hartley, David; Mercado, Shinel M.
Cc:	Arienti, Stephen
Subject:	RE: Project No. 164-241-Roof Replacement of Maintenance Facility-Windsor - Lead & Asbestos Investigations
Attachments:	Environmental Compliance Investigations_164-241.pdf

Erik,

Yes the entire roof is being replaced. Shinel Mercado is the Design Project Engineer.

Michael J. Strong, P.E.
Transportation Supervising Engineer
CT DOT - Office of Facilities Design
(P) (860) 594-3306
(F) (860) 594-3375
E-Mail Michael.Strong@ct.gov

From: Plimpton, Erik <EPlimpton@trccompanies.com>
Sent: Thursday, August 15, 2019 12:04 PM
To: Strong, Michael J <Michael.Strong@ct.gov>; Vella, Cornato R. <Cornato.Vella@ct.gov>; Hartley, David <David.Hartley@ct.gov>
Cc: Arienti, Stephen <SArienti@trccompanies.com>
Subject: FW: Project No. 164-241-Roof Replacement of Maintenance Facility-Windsor - Lead & Asbestos Investigations

Windsor MF

The roof replacement project is the entire site correct, all 3 sections of the roofs (original bays, admin, additional bays)

The admin and additional bays have EPDM now (original section is BUR)

Just want to make sure the entire roof is being replaced before we poke holes in the admin and bay addition epdm taking samples TODAY.

Please confirm

Erik R. Plimpton, PE, CHMM, CMC

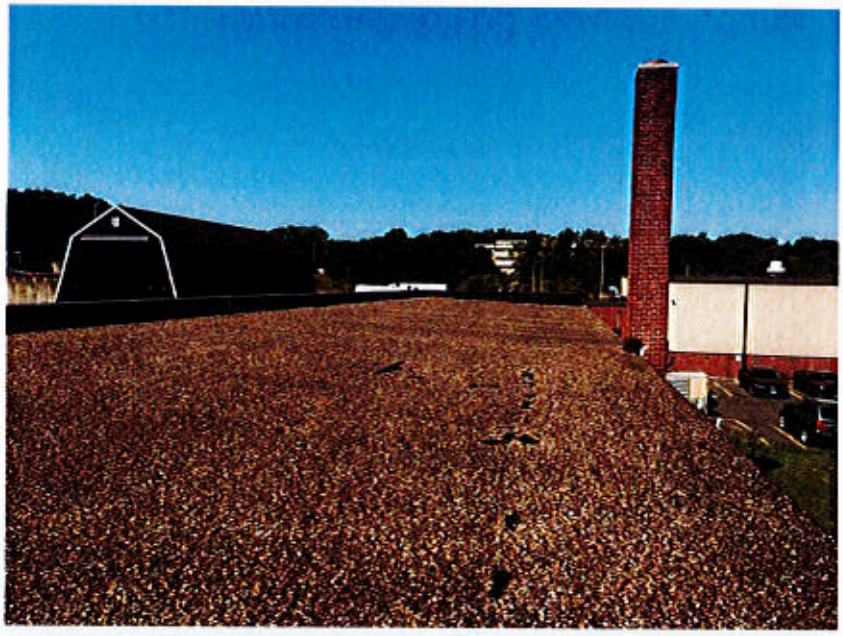
TRC
860-798-4699
eplimpton@trcsolutions.com

ConnDOT, Windsor MF, United States, Hartford County, , Connecticut, Windsor, 06095, Bloomfield Avenue, 357

Created	2019-08-15 13:32:44 UTC by Tyler Noll
Updated	2019-08-25 23:28:25 UTC by Jaime Robinson
Location	41.8512077, -72.6637561
Status	Survey In Progress

Job Information

Site Name	Windsor MF
Address	357 Bloomfield Avenue Windsor, Connecticut 06095
TRC Project Number	289951.6012.0710
Project Manager	Erik Plimpton
Inspector(s)	Hilton Hernandez, Jaime Robinson, Tyler Noll
Client	ConnDOT
Type of Asbestos Survey	Reno/Demo
Additional Analysis for NOB Materials (Calc)	TEM NY NOB 198.4
Date	2019-08-15
General Notes	-Roof 1 - 2 layers of foam coated with rubber over corrugated metal - not sampled/not suspect -Roof 2 - particle board coated with tar and rocks over concrete roof -Roof 3 - 2 layers of foam coated with rubber over corrugated metal roofing - not sampled/not suspect -No debris, old roofing material, or suspect material found above ceiling tiles. Nothing above ceiling tiles in ladies room.
Overview Photo	 Roof 2



Roof 1

Roof 3

C side

D side

Sides A/B

A side

Surveys Performed	Asbestos

Asbestos Section

(1), FL, 1, Gray/beige parapet roof flashing coping joint sealant, 1

Representative Photos

Material Information

Sampled or Assumed?	Assumed
Accessibility	Accessible
Material Acronym	FL, 1
Material Description	Gray/beige parapet roof flashing coping joint sealant
Is Material a Non-Friable Organically Bound (NOB)	Yes
Homogeneous Area	Roof 2
Total Approximate Quantity	40SF
Total Count	(1)
Total Count (number only)	1

(1), FL, 2, Silver painted roof flashing paper, first and second layers on roof 2, 1

Representative Photos

Material Information

Sampled or Assumed?	Assumed
Material Acronym	FL, 2
Material Description	Silver painted roof flashing paper, first and second layers on roof 2
Is Material a Non-Friable Organically Bound (NOB)	Yes
Homogeneous Area	Roof 2
Total Count	(1)
Total Count (number only)	1

(1), FL, 3, Black roof flashing cement, 1

Representative Photos

Material Information

Sampled or Assumed?	Assumed
Material Acronym	FL, 3
Material Description	Black roof flashing cement
Is Material a Non-Friable Organically Bound (NOB)	Yes
Homogeneous Area	Roof 2
Total Approximate Quantity	400 SF
Total Count	(1)
Total Count (number only)	1

FL, 4, Down spout sealant , 0

Representative Photos

Material Information

Sampled or Assumed?	Assumed
Accessibility	Inaccessible
Material Acronym	FL, 4
Material Description	Down spout sealant
Is Material a Non-Friable Organically Bound (NOB)	Yes
Homogeneous Area	Down spout on Roof 2
Notes	Not there. Downspouts are new
Total Count (number only)	0

FL, 5, Silver painted roof flashing paper first and second layers on chimney , 0

Representative Photos

Material Information

Sampled or Assumed?	Assumed
Accessibility	Accessible
Material Acronym	FL, 5
Material Description	Silver painted roof flashing paper first and second layers on chimney
Is Material a Non-Friable Organically Bound (NOB)	Yes
Homogeneous Area	Roof 2 chimney
Total Approximate Quantity	7SF
Total Count (number only)	0

(1), FL, 6, White, gray and brown chimney flashing sealant , 1

Representative Photos

Roof 2 chimney

Sample Location	Roof 2 chimney
Analyze by Layer	Yes
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-08-15
Time	11:13
Sample Location Photo	

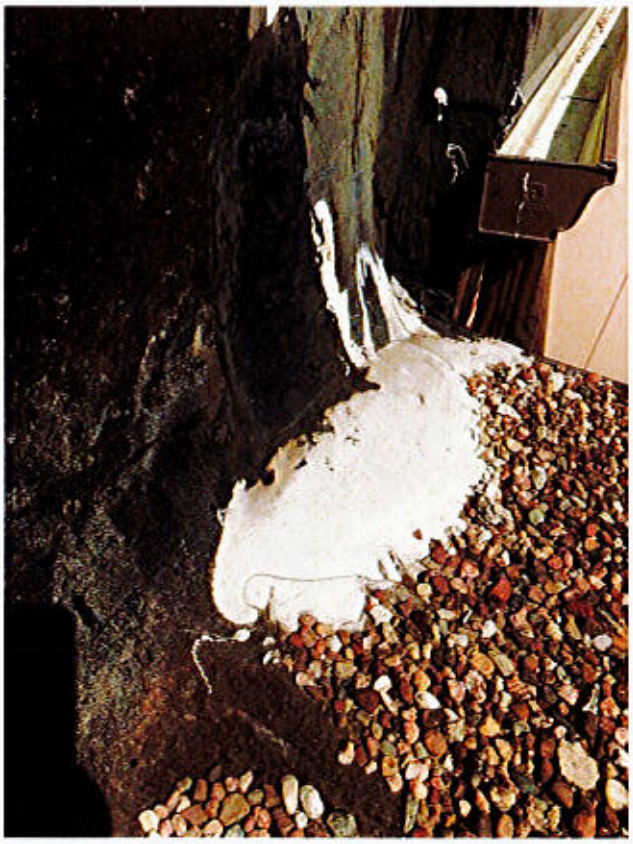
Material Information

Sampled or Assumed?	Sampled

Material Acronym	FL, 6
Material Description	White, gray and brown chimney flashing sealant
Is Material a Non-Friable Organically Bound (NOB)	Yes
Homogeneous Area	Roof 2 chimney
Total Count	(1)
Total Count (number only)	1

(1), FL, 7, White roof flashing coping sealant , 1

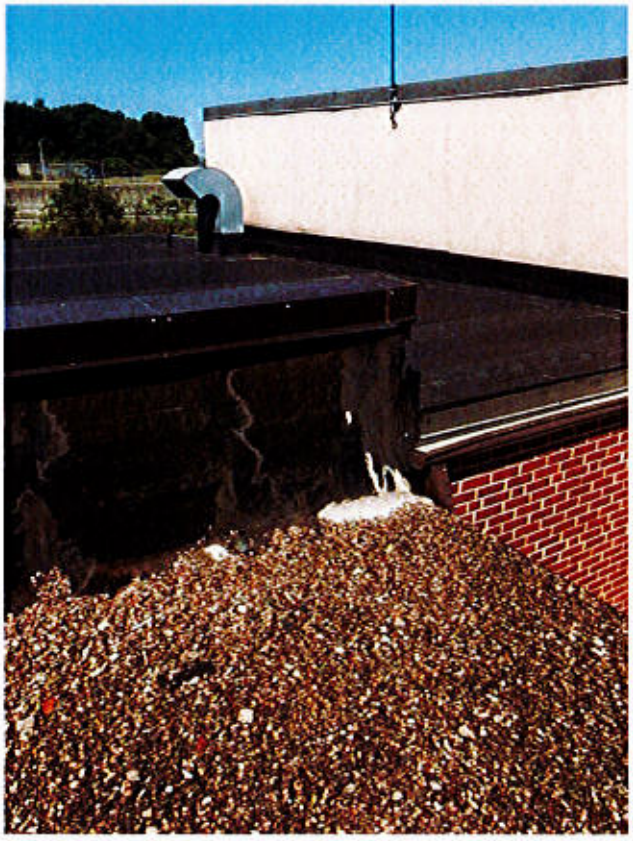
Representative Photos



Roof 2

Sample Location	Roof 2
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-08-15
Time	11:17

Sample Location Photo

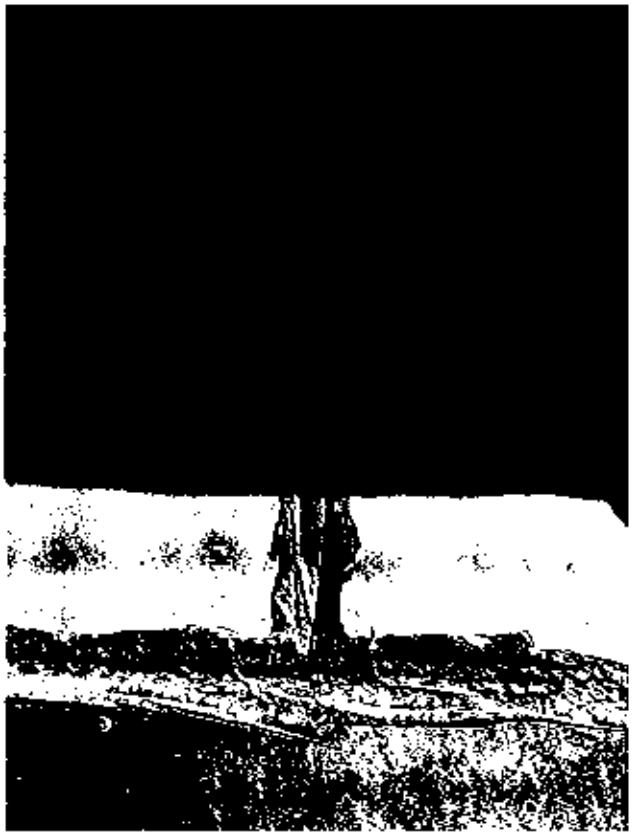


Material Information

Sampled or Assumed?	Sampled
Material Acronym	FL, 7
Material Description	White roof flashing coping sealant
Is Material a Non-Friable Organically Bound (NOB)	Yes
Homogeneous Area	Roof 2
Total Count	(1)
Total Count (number only)	1

(1), FL, 8, Black roof flashing sealant , 1

Representative Photos



Roof 1

Sample Location	Roof 1
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-08-15
Time	11:19

Sample Location Photo

Material Information

Sampled or Assumed?	Sampled
Material Acronym	FL, 8
Material Description	Black roof flashing sealant
Is Material a Non-Friable Organically Bound (NOB)	Yes
Homogeneous Area	Roof 1
Total Count	(1)
Total Count (number only)	1

FL, 9, Black roof edge flashing, 0

Representative Photos

Material Information

Sampled or Assumed?	Assumed
Accessibility	Accessible
Material Acronym	FL, 9
Material Description	Black roof edge flashing
Is Material a Non-Friable Organically Bound (NOB)	Yes
Homogeneous Area	Roof 2
Total Count (number only)	0

(1), FL, 10, Black gutter sealant, 1

Roof 1

Sample Location	Roof 1
Analyze by Layer	No
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-08-15
Time	11:25

Sample Location Photo

Material Information

Sampled or Assumed?	Sampled
Material Acronym	FL, 10
Material Description	Black gutter sealant
Is Material a Non-Friable Organically Bound (NOB)	Yes
Total Count	(1)
Total Count (number only)	1

PC-1, Gray patching cement, 0

Representative Photos

Material Information

Sampled or Assumed?	Assumed
Accessibility	Accessible
Material Acronym	PC-1
Material Description	Gray patching cement
Is Material a Non-Friable Organically Bound (NOB)	Yes
Homogeneous Area	Roof
Total Approximate Quantity	5 SF
Total Count (number only)	0

(1), RF, 1, Built up roofing, partical board layers with a tar coating over concrete roof base, 1

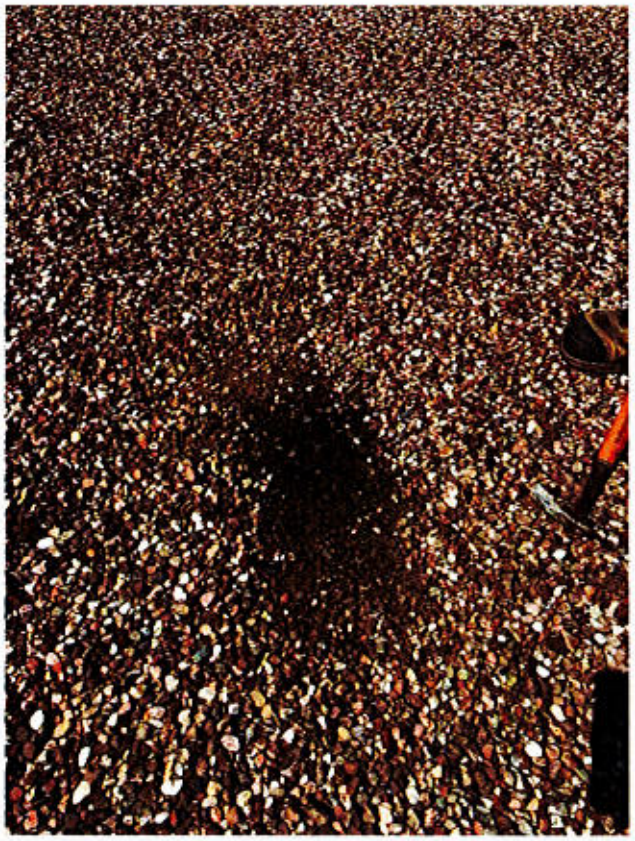
Representative Photos

Partical board layers with a tar coating over concrete roof

Roof 2

Sample Location	Roof 2
Analyze by Layer	Yes
Asbestos Bulk Analysis	PLM EPA 600/R93/116
Grab or Composite	Grab
Date	2019-08-15
Time	11:39

Sample Location Photo

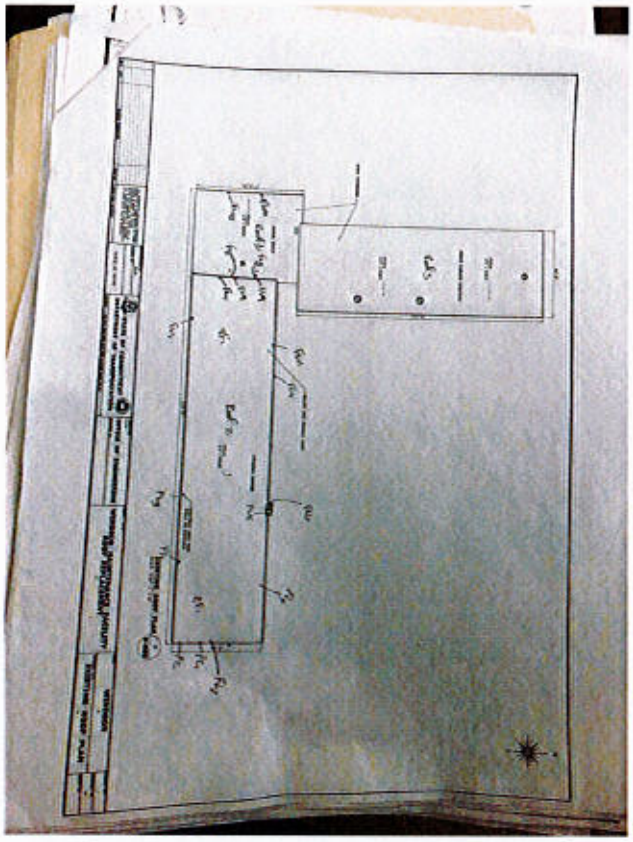


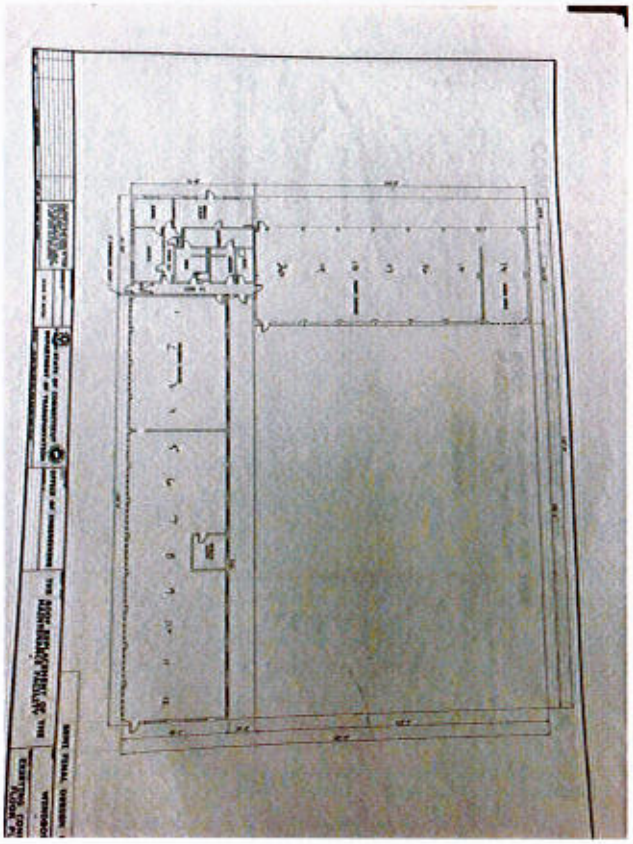
Material Information

Sampled or Assumed?	Sampled
Material Acronym	RF, 1
Material Description	Built up roofing, partical board layers with a tar coating over concrete roof base
Is Material a Non-Friable Organically Bound (NOB)	No
Homogeneous Area	Roof 2
Total Count	(1)
Total Count (number only)	1

General Information

Site Sketch Diagrams





Asbestos Samples Submitted to TRC Lab	Yes
Date Submitted to Lab	2019-08-15
App Name	WinBSI HBM Survey 1.0

Generate Report Documentation

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

Where should the document(s) be sent?	jbrobinson@trcsolutions.com
Generate Documents	N/A