



## CITY OF WATERVILLE

### *Community Development*

The City of Waterville is accepting proposals for the reroofing City Hall. The existing built up roofing shall be removed to the original board sheathing, and replaced with a 30 year warranted membrane product suitable for high traffic locations.

The City has an environmental report defining ACM materials contained in the existing roofing materials. The ACM report is attached. The roofing contractor shall be responsible for all demo and disposal of all existing roofing materials. The contractor shall also be responsible for maintaining dry conditions within the building, at all times during the progress of the project.

The City will coordinate with the successful roofing contractor to install permanent City Employee fall protection posts. The roofer shall allow City employees access to the roof and to the attic space below to install these posts. Coordination with City crews will be required to open some deck areas to allow the installation of the posts to the stringers below. Approximately one week will be required by City crews to install these posts. The roofer may utilize the new posts during the project, but, the roofer shall be responsible to define all elements of their own fall protection plan, with or without using the permanently installed posts. All roofing penetrations for the City Employee Fall Protection posts shall be flashed and sealed by the roofer and shall be included in the 30 year warrantee.

The City also desires to utilize the roofers crane to lift approximately 250 sheets of 5/8 plywood onto the roof for installation in the attic space below. The City will have adequate crew to load the plywood on the ground and offload the material onto the roof. Once on the roof, City crews will open the roof and place the material in the attic below. Any sheathing opening will be promptly reclosed by the City crews, with cooperation and review by the roofer, and the permanent closure shall be weather protected by the roofer. This operation shall occur as soon as possible in the project schedule.

A sketch of the roof is attached showing the approximate roof size and feature locations. A high roof on the east end of the building is not included in this project.

The roofer shall be required to generate details and supply all necessary labor equipment and materials for the following areas/items:

- tapered insulation or other means to direct water to existing roof drains,
- new drain screens at existing drains,
- brick chimney flashing detail,
- roof perimeter nailers , flashing, and trim details,
- details at plumbing stack pipes,
- pitch pockets, if used,
- flashing at wall above low roof (at high roof area),
- flashing at decorative metal feature above main City Hall entrance,

roof hatch flashing, and any other roof penetrations or additional details that are required or proposed to achieve a quality roof system.

All above details shall be reviewed and approved by the roofing material manufacturer that provides the 30 year warrantee, and shall be submitted to the City with the manufacturers approval. Select cutting and patching shall be allowed to determine existing conditions. The City shall also review and note concerns and/ or modifications of all details to the satisfaction to the City. After final City acceptance, complete roof demo may begin.

Any details required to secure the required 30 year warrantee, that may be missing from the above discussion, or as required to provide a sound roof system, shall be provided at no additional cost by the Roofing Contractor.

It is anticipated that some original sheathing material may require replacement, even though inspection of the underside of the roof deck (visible from the attic space) does not indicate rot or deterioration. The roofer shall plan to remove and replace approximately 300 sf of decking. New deck material shall be of equal thickness and strength of the original decking, but does not need to "match" original materials, i.e. exterior plywood of ¾ or greater may be used with securely attached shim layers, as needed, to meet thickness. If additional material is needed, in excess of 300 sf, the City will compensate on a time and material basis.

There are a number of items/fixtures on the existing roof, some to remain, some to be removed. The following list is representative of the fixtures to be removed, but, minor modifications may be requested by the Owner as existing conditions are uncovered:

The existing radio antenna with guy wires shall be removed. No replacement antenna will be installed.

All HVAC units shall remain in the same locations. The roofer shall be responsible to coordinate with the City related to disconnecting and reconnecting any fixture within the project, including, electrical lines & refrigerant lines and other similar details. The City will arrange to disconnect and reconnect, given sufficient advance notice. If the work can proceed without disconnecting the utility lines, the City prefers to assist the roofer to temporarily support or shift the lines and avoid the cost of disconnection and reconnection. The roofer shall make every attempt to shift utilities whenever possible.

One exception to this shift option; the City shall disconnect and relocate Waterville Opera House satellite dish cables and electrical lines now exposed on the roof surface,; no loose wires will be exposed when the roof is finished and the City/ Waterville Opera House, shall relocate these lines in advance of the roofing demo and reroofing.

Details of sleepers, crickets and other obstructions or penetrations shall all be addressed prior to demo and any changes in the existing layout shall be included in the work after the City has had a chance to review and approve.

Two of the three existing aluminum roof ventilators shall be removed, one shall remain.

One roof hatch shall be removed, one shall remain.

The roofer shall have crane staging access at the SE corner of the customer parking lot for the duration of the project. Only two roof hatches exist at this time to allow personal access to the roof. The roofer shall at all times provide protection of all flooring to avoid any possibility of roofing materials transferred to any finished flooring product. The Opera House will have scheduled events during the roofing project, and the roofer will be required to remove and replace, as necessary, any temporary flooring protection felt, paper, or other method or product used to protect flooring.

Bidders shall be required to provide a bid bond in the amount of 5% of the bid price. The selected contractor shall be required to provide 100% payment, performance and material bonds.

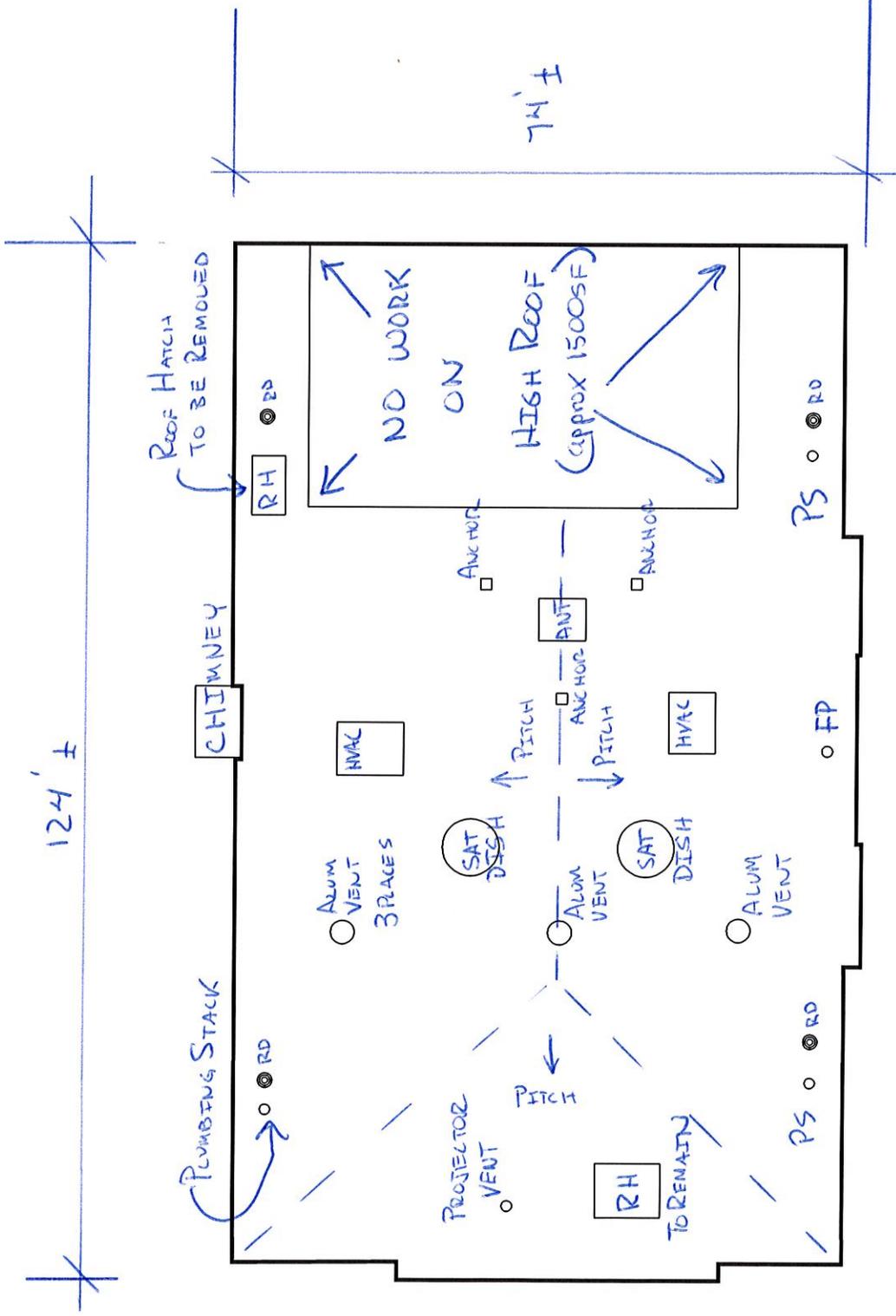
A mandatory pre-bid meeting will be held on Thursday May 26<sup>th</sup> at 10am.

Any questions or comments shall be directed to Greg Brown, City Engineer. (207) 680-4232. [gbrown@waterville-me.gov](mailto:gbrown@waterville-me.gov) Questions submitted in writing on or before Monday June 6<sup>th</sup>, shall be answered in writing on or before Wednesday June 8<sup>th</sup>, 2016. Bids are due on 10am on Tuesday June 14<sup>th</sup>, 2016. Bids shall be marked "Sealed Bid" – "City Hall Roof".

The project shall be awarded within 30 days of bid opening. The roofer shall have 90 days from Notice to Proceed to complete the project.

The City reserves the right to accept or reject any or all bids.

Apr 19, 2016



WATERVILLE CITY HALL  
ONE COMMON ST.

CRANE STAGING AREA



FRONT S  
↑ N

**ASBESTOS IMPACT SURVEY**

**FOR**

**City Of Waterville  
1 Common Street  
Waterville, Maine 04901**

**Prepared for:**

**Greg Brown  
Facility Manager  
City of Waterville  
1 Common Street  
Waterville, Maine 04901**

**Prepared by:**

**Icon Environmental  
526 West River Road Suite 2  
Augusta, Maine 04330  
207-458-7143  
Iconenviro@aol.com**

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## **1.0 Background**

Icon Environmental Consultants (Icon) was retained by Greg Brown, Facility Manager of the City of Waterville. We were tasked with performing the Maine DEP required Asbestos Impact Survey for City of Waterville, City Hall roof.. The report covers the following : Main roof including flashing and multiple levels of roof membranes. The objective of this limited survey was to assess and sample Asbestos Containing Materials (ACM) that may exist in the roof as described.

The field survey was conducted by Mr. Craig E. Wilson (Icon), a licensed Asbestos Inspector, Maine DEP number, AI-0033 on August 17. The roof was reviewed for suspect non friable ACM containing materials. The locations and quantities of these materials were recorded. Quantity estimates were based on field observations.

## **2.0 Survey Limitations**

As with any scientific study, a facility asbestos survey is subject to a variety of limitations. Note: This survey does not address any other regulated hazards. Materials assessed were limited to roof flashing and membranes. Limitations that should be considered in the interpretation of the results of this survey include the following:

- A. Asbestos surveys may not be able to identify all asbestos present throughout facility. A thorough study should be capable of identifying approximately 90 percent of accessible (by non-destructive methods) materials present.
- B. Cost figures used in developing abatement costs are estimated, based on historical information. These costs should be considered as estimates and used for budgetary purposes only. For cost projections in future years, an adjustment that takes into account inflation and the state of abatement industry should be utilized.
- C. Once a final plan is in place more accurate portrayal of the projects value can be made. This final plan represents project expense based on the owner's decision to abate all materials' present or abate portions of same materials.

## **3.0 Observations**

City Hall roof is comprised of three distinct layers. The layers are described from the roof deck to surface.

Layer 1 - Deck group has 3 to 4 membrane layers and includes mastic on wood surface

Layer 2 - Below brown press board insulation, in some locations between brown and foam panels four to five membrane layers

Layer 3 - Above brown insulation panels to silver covered surface membrane

In addition the roof edge consists of the same layers with copper or aluminum metal edge between layers. The main body of roof materials reaches the edge and as such will be included as part of the abatement if positive.

### **Suspect Items Tested for Asbestos or Assumed Positive**

Edge flashing  
Roof membranes

### **4.0 Asbestos Findings and Recommendations**

If ACM is identified in this survey it is depicted in Appendix A. ACM, which may be impacted by planned renovations should be removed prior to the start of the actual work is identified in Appendix A.

#### **Asbestos containing materials:**

**Roof edge flashing - Chrysotile asbestos less than 0.25% (roof membranes reach exterior of roof). Roof edge flashing will be considered asbestos due to underlying positive materials.**

**Roof membrane - middle layer Chrysotile asbestos 10.8%**

#### **Regulatory Information**

**This Asbestos Demolition/Renovation Survey meets Maine DEP standards and can be used to acquire permits.**

A material is considered asbestos if it contains greater or equal to 1% asbestos. Regulations pertaining to asbestos are summarized below: Maine DEP Chapter 425, U. S. EPA, Occupational Safety and Health Administration (OSHA) and NESHAP Regulations apply to this project. The specific provisions of the National Emissions Standards for Hazardous Air Pollutants (NESHAP), for Renovation or Demolition of buildings containing asbestos are broken down into categories of notification, work practices, waste hauling, and waste disposal. NESHAP also regulates manufacturing and fabricating operations, spray applications of asbestos, waste disposal for asbestos mills, inactive waste disposal sites, and established standards for asbestos mills and roadways.

## 5.0 Cost Estimation

The estimated contractor removal expense is approximately \$16,190.00. Removal fee includes roof flashing including and roof membrane.

This estimate does not include the asbestos survey and report cost of \$765.00.

If you have any questions or concerns regarding this report, please do not hesitate to contact us at (207) 458-7143.

Sincerely,

*Craig E. Wilson*

Craig E. Wilson  
Asbestos Surveyor ME DEP AI-0033

Asbestos Renovation Survey Waterville City Hall Roof

**APPENDIX A**  
**ESTIMATED MATERIAL QUANTITY**  
**ASBESTOS**

### Asbestos Summary Positive Materials

<u>Location</u>	<u>Material</u>	<u>Estimated Quantity</u>
Roof	Membranes	6,000 square feet
Roof	Edges/penetrations	910 square feet

**APPENDIX B**  
**LABORATORY ANALYSIS**



**EMSL Analytical, Inc.**

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ProjectID:

Attn: **Craig Wilson**  
**Icon Environmental Consultants of ME**  
**526 West River Road**  
**Suite 2**  
**Augusta, ME 04330**

Phone: (207) 458-7143  
Fax: (207) 621-8324  
Received: 08/17/15 12:27 PM  
Analysis Date: 8/19/2015  
Collected:

Project: City Waterville

**Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by PLM  
via EPA 600/R-93/116 section 2.3**

SAMPLE ID	DESCRIPTION	APPEARANCE	% MATRIX MATERIAL	% NON-ASBESTOS FIBERS	ASBESTOS TYPES
1A 621501506-0001	Roof Edge by Port - Roof Membranes	Brown/Silver Fibrous Heterogeneous	100	None	<0.25% Chrysotile
1B 621501506-0002	Roof Edge by Common - Roof Membranes	Not Analyzed			
1C 621501506-0003	Roof Edge at River Side of Building - Roof Membranes	Not Analyzed			
2A 621501506-0004	By New Section Deck Level - Roof Membranes	Gray/Black Fibrous Homogeneous	98.1	1.9 Glass	No Asbestos Detected
2A1 621501506-0005	By New Section Below Bron Ins - Roof Membranes	Gray/Black Fibrous Homogeneous	89.2	None	10.8% Chrysotile
2A2 621501506-0006	By New Section Above Brown to Surface - Roof Membranes	Gray/Black Fibrous Homogeneous	97.7	2.3 Glass	No Asbestos Detected
3A 621501506-0007	Center of Roof at Deck Level - Roof Membranes	Brown/Silver Fibrous Heterogeneous	100	None	No Asbestos Detected
3A1 621501506-0008	Center of Roof Below Foam - Roof Membranes	Not Analyzed			
3A2 621501506-0009	Center of Roof Above Brown to Surface - Roof Membranes	Brown/Silver Fibrous Heterogeneous	97.5	2.5 Glass	No Asbestos Detected

Analyst(s)

Desiree Lunt (8)

Alexander Maxinoski, Asbestos Laboratory Manager  
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. This report contains data that is (are) not covered by the NVLAP accreditation. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Samples analyzed by EMSL Analytical, Inc. South Portland, ME

Initial report from 08/19/2015 08:08:10



**EMSL Analytical, Inc.**

181 John Roberts Road, South Portland, ME 04106  
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<http://www.EMSL.com> [portlandlab@emsl.com](mailto:portlandlab@emsl.com)

EMSL Order: 621501506  
CustomerID: ICON50  
CustomerPO: cc070721  
ProjectID:

Attn: **Craig Wilson**  
**Icon Environmental Consultants of ME**  
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SAMPLE ID	DESCRIPTION	APPEARANCE	% MATRIX MATERIAL	% NON-ASBESTOS FIBERS	ASBESTOS TYPES
4A 621501506-0010	By Port Deck Level - Roof Membranes	Brown/Silver Fibrous Heterogeneous	100	None	No Asbestos Detected
4A1 621501506-0011	By Port Below Foam - Roof Membranes	Not Analyzed			
4A2 621501506-0012	By Port Above Brown to Surface - Roof Membranes	Brown/Silver Fibrous Heterogeneous	98.0	2.0 Glass	No Asbestos Detected

ME CERT # BA-0166 (DL)

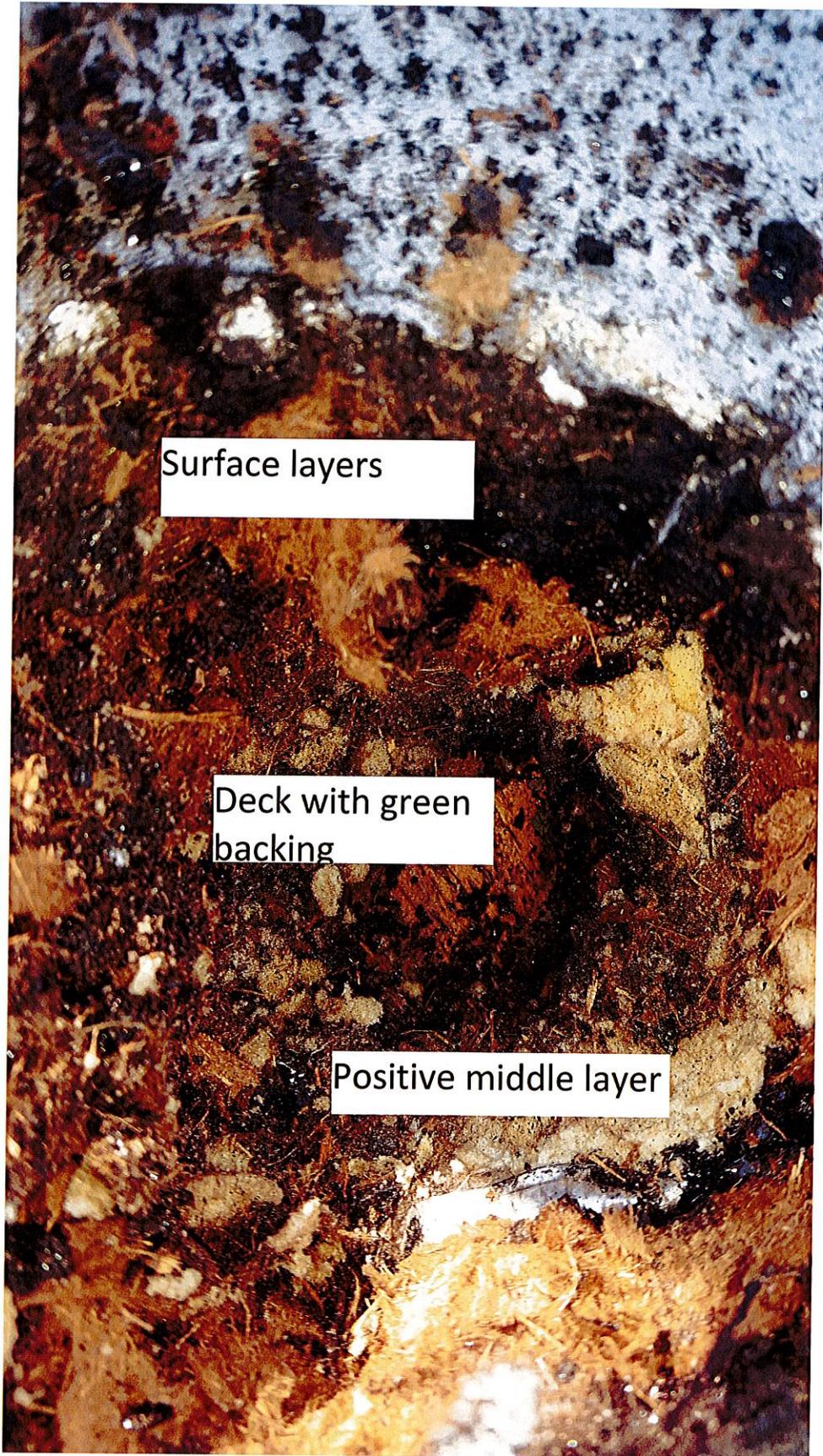
Analyst(s) \_\_\_\_\_  
Desiree Lunt (8)

  
Alexander Maxinoski, Asbestos Laboratory Manager  
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. South Portland, ME

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**PHOTOGRAPH**



Surface layers

Deck with green backing

Positive middle layer