

Appendix K
Asbestos Assessment Report

ASBESTOS BRIDGE INVESTIGATION AND ASSESSMENT SURVEY

FOR THE

I-81 VIADUCT PROJECT (NEW YORK STATE DOT D031085) PIN 3501.60 SYRACUSE, NEW YORK

FEBRUARY 2020

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1.0 Project Summary

Watts Architecture & Engineering D.P.C. (Watts), as a subconsultant to Parsons Transportation Group of New York (Parsons), performed an Asbestos Investigation and Assessment Survey for the identification of asbestos-containing materials (ACM) as part of the I-81 Viaduct project, D031085, PIN 3501.60, in the City of Syracuse, Onondaga County, New York. A discussion of the alternatives under consideration is found in the DEIS.

The purpose of the asbestos investigation and assessment survey was to determine the presence, location and quantity of ACM (defined as any material containing more than 1% of asbestos) that may be disturbed during future roadway and bridge demolition or rehabilitation activities. This report describes the work performed and the analytical results obtained. The survey was limited to materials that were exposed or accessible at the time of the inspection.

This report consists of information for 109 bridges. The bridge surveys were conducted between August 2013 and February 2020. The assessment for each of the bridges included in this report included:

- A review of bridge record plans that were made available by the New York State Department of Transportation (NYSDOT).
- A review of previous asbestos testing reports that were provided by NYSDOT.
- A review of the NYSDOT asbestos database.
- Field investigations for each bridge to visually identify suspect ACM. The field investigation included the collection of representative samples of each identified, accessible suspect ACM.
- Laboratory analysis of suspect materials for asbestos content.

This investigation and assessment was conducted by New York State Department of Labor (NYSDOL) certified asbestos inspectors. Access to the bridges for the assessment was granted by the NYSDOT. Watts performed the majority of the bridge investigations in conjunction with other bridge investigations being performed by C&S Companies and/or Popli Design Group. For the remainder of the bridges, Watts was on-site when NYSDOT was conducting their biennial inspections or was able to conduct the inspections without assistance.

In addition, in the future as necessary property acquisitions are completed and building structures targeted for demolition to facilitate roadway construction are identified, additional asbestos pre-demolition building surveys will be required. As currently scoped, approximately 25 buildings or building related structures are proposed to be impacted by the Viaduct

Alternative and four (4) structures are scheduled to be impacted in the future under the Community Grid alternative, however, this number may change as the project evolves. The investigation and regulated building materials survey of these buildings is outstanding at this time.

Once the preferred design alternative has been identified, a recommendation and action list will be prepared to address any outstanding work for bridges and roadway sections where access was not available and a survey of the structure/roadway or a portion of the structure/roadway (e.g., either the surface deck or the substructure) is still outstanding. In addition, contact will be made with each of the utility companies where the preliminary design has identified that future impacts are anticipated to assess their knowledge about the presence of asbestos-containing materials associated with the composition of their underground utility lines.

2.0 Site Description

The I-81 Viaduct project is located in the City of Syracuse, New York. A total of one hundred and nine (109) bridges were assessed as part of the project and are summarized in this report. The bridges found in Table 1 are listed sequentially by BIN number per study area. The bridge locations are shown in the Site Location Map found in Appendix A. The table also identifies if a bridge will be impacted by which alternative, however, this identification is preliminary and will likely change as the project design progresses.

Table 1 - Summary of Identified Asbestos-Containing Materials Impacted By Alternative

BIN	Location	ACM Identified	Alternative Impacted Viaduct Community Grid		Estimated Amount
I-481 NORTH STUDY AREA					
1031711	I-481 Southbound over I-81	No ACM identified			
1031712	I-481 Northbound over I-81	No ACM identified			
1072591	I-481 Southbound over Northern Blvd.	No ACM identified			
1072592	I-481 Northbound over Northern Blvd.	No ACM identified			
1072781	I-481 Southbound over Totman Road	No ACM identified		X	
1072782	I-481 Northbound over Totman Road	No ACM identified			
1072791	I-481 Southbound over Thompson Road	No ACM identified		X	
1072792	I-481 Northbound over Thompson Road	No ACM identified		X	
I-481 EAST STUDY AREA					
1002131	I-481 Southbound over Genesee Street	No ACM identified			
1002132	I-481 Northbound over East Genesee Street	No ACM identified			
1044440	I-481 over Butternut Street	Outside the Study Area Limits – Was Not Investigated At This Time			
1051081	I-690 Westbound over CSX Railroad	Compressed asbestos sheet packing			80 SF
1051082	I-690 Eastbound over CSX Railroad	Compressed asbestos sheet packing			80 SF
1051120	I-481 Northbound over Service Road	Compressed asbestos sheet packing			142.5 SF
1051160	South Midler Avenue over I-690	Compressed asbestos sheet packing			112 SF
		Paper over tar wrap on drain pipe			762.36 LF
		Premoulded bituminous joint filler (assumed)			1173.04 SF
		Waterstop (assumed)			89.33 SF
1064650	Kinne Road over I-481	Compressed asbestos sheet packing			82.5 SF
		Premoulded bituminous joint filler (assumed)			7 SF
1064689	Thompson Road over I-690	Compressed asbestos sheet packing			202 SF
1064691	I-690 Westbound over Bridge	Compressed asbestos sheet packing			152.3 SF
		Waterstop (assumed)			86.98 SF
		Premoulded bituminous joint filler (assumed)			114.22 SF
1064692	I-690 Eastbound over Bridge	Compressed asbestos sheet packing			153.94 SF
		Waterstop (assumed)			154.97 SF
		Premoulded bituminous joint filler (assumed)			115.45 SF

BIN	Location	ACM Identified	Alternative Impacted		Estimated Amount
			Viaduct	Community Grid	
1072530	Thruway Ramp over I-481	No ACM identified			
1072571	I-481 Southbound over Collamer Road	No ACM identified			
1072572	I-481 Northbound over Collamer Road	No ACM identified			
1072581	I-481 Southbound over E. Taft Road	No ACM identified			
1072582	I-481 Northbound over E. Taft Road	No ACM identified			
1093510	I-690 Service over I-481	Compressed asbestos sheet packing Waterstop (assumed)			88 SF 102.96 SF
1093520	I-690 Eastbound Ramp over I-481 Southbound	Compressed asbestos sheet packing Waterstop (assumed)			64 SF 132 SF
1093530	I-481 Southbound over I-690 Westbound	Compressed asbestos sheet packing Waterstop (assumed)			118 SF 142.5 SF
1093540	I-690 Eastbound over I-481 Northbound Ramp	Compressed asbestos sheet packing Waterstop (assumed)			64 SF 136 SF
1093550	I-481 Northbound over Service Road to I-690	Waterstop (assumed)			135 SF
1093561	I-481 Southbound over Manlius Center Road	Compressed asbestos sheet packing		X	112 SF
1093562	I-481 Northbound over Manlius Center Road	Compressed asbestos sheet packing Waterstop (assumed)		X	112 SF 164 SF
1093671	I-481 Southbound over Kirkville Road	Compressed asbestos sheet packing Waterstop (assumed)			108 SF 195 SF
1093672	I-481 Northbound over Kirkville Road	Compressed asbestos sheet packing Waterstop (assumed)			108 SF 195 SF
1093681	I-481 Southbound over NYS Thruway 90	Compressed asbestos sheet packing Waterstop (assumed)			86 SF 137 SF
1093682	I-481 Northbound over NYS Thruway 90	Compressed asbestos sheet packing Waterstop (assumed)		X	86 SF 137 SF
I-481 SOUTH STUDY AREA					
1031501	I-81 Southbound over Route 173 Seneca Turnpike	No ACM identified		X	
1031502	I-81 Northbound over Route 173 Seneca Turnpike	Was Not Investigated – New Bridge Constructed in 2006		X	
1031510	East Glen Avenue over I-81	Compressed asbestos sheet packing White caulk in abutment joint Grey caulk around railing supports		X	67 SF 102.6 LF 252 LF
1031529	I-81 over West Calthrop Road	No ACM identified			
1031539	I-81 over East Brighton Avenue	No ACM identified		X	
1069090	I-481 Southbound to Southbound I-81 Ramp	No ACM identified		X	
1069100	East Brighton Avenue over I-481 Ramp (I-81 SB to NB I-481 Ramp)	No ACM identified		X	
1069110	East Brighton Avenue over I-81 Ramps to I-481 Northbound	Black fibrous wrap around water pipe insulation Paper over fibrous coating inside aluminum pipe wrap Waterstop (assumed) Mastic duct sealing compound (assumed)		X	577.25 LF 138 SF 138 SF 2 LF
1069120	East Brighton Avenue over I-81 Ramps to I-481 Southbound	No ACM identified		X	
1069131	I-481 Southbound over Quarry Road	No ACM identified			
1069132	I-481 Northbound over Quarry Road	No ACM identified			

BIN	Location	ACM Identified	Alternative Impacted Viaduct Community Grid		Estimated Amount
1069141	I-481 Southbound over E-L RR	No ACM identified			
1069142	I-481 Northbound over E-L RR	No ACM identified			
1069151	I-481 Southbound over Jamesville Road	No ACM identified			
1069152	I-481 Northbound over Jamesville Road	No ACM identified			
1069160	Ramp to I-481 South over Butternut Creek	No ACM identified			
1069170	Ramp to I-481 North over Butternut Creek	No ACM identified			
I-81 VIADUCT STUDY AREA					
1008489	I-81 NB/SB over Salina Street (Route 173)	No ACM identified	X	X	
1031549	I-81 over Colvin Street	Compressed asbestos sheet packing	X	X	211.3 SF
103156A	I-81 Southbound Ramp over Jackson Street	Was Not Investigated – Tested in 1997 under Asbestos Term Agreement	X	X	
103156B	I-81 Southbound Ramp over Jackson Street to Adams Street	Compressed asbestos sheet packing	X	X	180 SF
103156C	I-81 Northbound Ramp over Genesee Street	Was Not Investigated – Tested in 1997 under Asbestos Term Agreement	X	X	
103156D	I-81 Southbound Ramp over Genesee Street	Was Not Investigated – Tested in 1997 under Asbestos Term Agreement	X	X	
1031559	I-81 NB/SB over Castle Street	No ACM identified	X	X	
1031569	I-81 NB/SB from Fayette Street to Van Buren Street over Adams Street	No ACM identified	X	X	
1031570	Butternut Street over I-81	No ACM identified	X	X	
1031580	Spencer Street over I-81	No ACM identified	X	X	
1031590	Court Street over I-81	No ACM identified	X	X	
1031600	West Bear Street (Route 298) over I-81	No ACM identified	X	X	
1031610	Hiawatha Boulevard West over I-81	No ACM identified			
1049659	I-690 over Hiawatha Boulevard West	Compressed asbestos sheet packing Premoulded bituminous joint filler (assumed) Caulking Compound (assumed) Waterproofing membrane (assumed)			226 SF 831 SF 295.3 LF 15,012.8 SF
1050001	North West Street Southbound over West Genesee Street (Highway 5)	Compressed asbestos sheet packing	X	X	95.41 SF
1050002	North West Street Northbound over West Genesee Street (Highway 5)	No ACM identified	X	X	
1050010	Northbound North West Ramp to Herald Place over Onondaga Creek	No ACM identified	X	X	
1050759	I-690 over North Geddes Street	Compressed asbestos sheet packing			195.7 SF
1050779	I-690 EB/WB over Leavenworth Avenue	Compressed asbestos sheet packing	X	X	244.3 SF
1050780	North West Street Ramp BB to Westbound I-690 over I-690	Compressed asbestos sheet packing Caulking compound Roofing cement in joint between deck and NW wing wall	X	X	106 SF 7.5 LF 0.6 SF
1050790	Westbound I-690 Ramp DD to North West Street over I-690	Compressed asbestos sheet packing	X	X	156 SF

BIN	Location	ACM Identified	Alternative Impacted		Estimated Amount
			Viaduct	Community Grid	
1050800	Butternut Street to Southbound North West Street over Onondaga Creek (Franklin Street to West Street Ramp)	No ACM identified	X	X	
105080A	I-690 Westbound Ramp to Southbound North West Street over Onondaga Canal	Compressed asbestos sheet packing Gray caulk at base of light pole on north parapet Duct sealant compound around lighting conduit in joints on north parapet	X	X	21 SF 1.5 LF 1.5 LF
1050821	I-690 Westbound over Onondaga Creek	Compressed asbestos sheet packing Joint sealer (between deck and cheek walls, SW corner of bridge) (2010 Survey Data)	X	X	70 SF N/A
1050822	I-690 Eastbound over Onondaga Creek	Compressed asbestos sheet packing Joint sealer (between deck and cheek walls, NE, SW and North corners of bridge) White caulking compound around guide rail base plates (2010 Survey Data)	X	X	67.6 SF 3 LF 6 LF
1050840	Northbound North West Street Ramp to Eastbound I-690 over Onondaga Creek	Compressed asbestos sheet packing Grey joint sealer (between deck and cheek walls, NW corner of bridge) (2010 Survey Data)	X	X	48.4 SF 1 LF
1050851	I-690 Westbound over North Franklin Street	Compressed asbestos sheet packing Caulk around/under bearing pads	X	X	550 SF 20 LF
1050852	I-690 Eastbound over North Franklin Street	Compressed asbestos sheet packing	X	X	487 SF
1050910	I-690 Westbound over North Salina Street	Compressed asbestos sheet packing Caulking compound around guide rail base plates – 6 locations (2012 Survey Data)	X	X	56 SF 0.6 SF
1050921	I-690 Westbound Ramp to I-81 over East Willow Street	Compressed asbestos sheet packing Caulking compound on west abutment vertical face	X	X	84 SF 15 LF
1050922	I-690 Westbound Ramp to NB I-81 over East Willow Street	Compressed asbestos sheet packing Caulking compound on west abutment vertical face	X	X	159 SF 15 LF
1050950	I-690 over State Street	No ACM identified	X	X	
105095A	I-81 Northbound Ramp to I-690 Westbound over James and North State Street	Was Not Investigated	X	X	
1051000	I-690 Eastbound over I-81 and North Clinton, North Salina, East Willow, James and North State Streets	Compressed asbestos sheet packing (1997 Survey Data)	X	X	46.28 SF
105100A	I-690 Eastbound to I-81 Southbound over North Townsend Street	Was Not Investigated	X	X	
1051030	I-690 Westbound over North Townsend Street	Compressed asbestos sheet packing	X	X	171 SF
1051050	I-690 Westbound over North McBride Street	No ACM identified	X	X	
1051061	I-690 Westbound over North Catherine Street	No ACM identified	X	X	
1051062	I-690 Eastbound over Catherine Street	No ACM identified	X	X	
1051063	I-690 Eastbound Ramp over Catherine Street	No ACM identified	X	X	
1051091	I-690 Eastbound over North Crouse Avenue	No ACM identified	X	X	

BIN	Location	ACM Identified	Alternative Impacted		Estimated Amount
			Viaduct	Community Grid	
1051092	I-690 Westbound over North Crouse Avenue	No ACM identified	X	X	
1051119	I-690 EB/WB over Lodi Street	Compressed asbestos sheet packing Grey railing caulk	X	X	332 SF 26 LF
105113A	I-690 Eastbound Ramp to Teall Avenue	Compressed asbestos sheet packing Gray caulk around railing mounts	Complete	Complete	75 SF 40 LF
1051139	I-690 over Beech Street	Compressed asbestos sheet packing Caulking compound around hand rail base plates on north and south parapets	Complete	Complete	720 SF 72.5 LF
1051149	I-690 over Teall Avenue	Compressed asbestos sheet packing	Complete	Complete	217.5
1051159	I-690 over Peat Street	No ACM identified			
1053840	I-81 Northbound Ramp over Highway 5/Erie Street	Compressed asbestos sheet packing Caulking compound Gray conduit gasket	X	X	125 SF 150 LF 1 SF
105384A	I-81 Northbound Ramp to I-690 Eastbound over Highway 5/Erie Street	Was Not Investigated	X	X	
1053860	I-81 Southbound from Highway 5 over North Townsend Street	Compressed asbestos sheet packing Caulking compound associated with control joint within the parapet wall (1997 Survey Data)	X	X	N/A N/A
1053870	I-81 Northbound over North Townsend Street	Compressed asbestos sheet packing	X	X	160 SF
1053881	I-81 Southbound over East Willow, James, and North State Streets	Compressed asbestos sheet packing Caulk compound	X	X	100 SF 48 LF
1053882	I-81 Northbound over East Willow, James, and North State Streets	Compressed asbestos sheet packing	X	X	65 SF
105388A	I-81 Southbound Ramp to I-690 Eastbound over James Street	No ACM identified	X	X	
1053931	I-690 Westbound over West Bear Street	Compressed asbestos sheet packing Waterstop (assumed)			96.75 SF 80.88 SF
1053932	I-690 Eastbound over West Bear Street	Compressed asbestos sheet packing			116.43 SF
1053941	I-690 Westbound over Liberty Street	Compressed asbestos sheet packing Bituminous joint filler (assumed)			99 SF 153.08 SF
1053942	I-690 Eastbound over Liberty Street	Compressed asbestos sheet packing Epoxy bonding compound (assumed) Bituminous joint filler (assumed)			98.34 SF 2780.51 SF 152.58 SF
1053969	I-690 over Van Rensselaer Street	Compressed asbestos sheet packing			244.33 SF
1054020	I-690 Westbound over North Clinton Street	Compressed asbestos sheet packing Bearing pad Masonry coating	X	X	26 SF 141 SF 3,740 SF
1064590	I-690 Westbound Ramp to I-81 Southbound over East Fayette, East Washington, East Water, Highway 5 and Almond Streets	Compressed asbestos sheet packing Caulking compound associated with the guide rail posts (1997 Survey Data)	X	X	N/A N/A
1093571	I-481 Southbound over CSX Railroad Yard/Amtrak	Compressed asbestos sheet packing Waterstop (assumed) Premoulded bituminous joint filler (assumed) Caulking compound (believed to be removed)		X	76 SF 107.2 SF 47 SF 123 LF
1093572	I-481 Northbound over CSX Railroad Yard/Amtrak	Compressed asbestos sheet packing Waterstop (assumed) Premoulded bituminous joint filler (assumed) Caulking compound (believed to be removed)		X	76 SF 107.2 SF 47 SF 150 LF

BIN	Location	ACM Identified	Alternative Impacted		Estimated Amount
			Viaduct	Community Grid	
1095510	I-690 Westbound over I-81	Bridge Deck Still Requires Inspection	X	X	
1031639	I-81 Southbound Ramp over Carausel Center Drive, Ley Creek, CSX Railroad	Was Not Investigated	X	X	
2208620	Fineview Place over Renwick Avenue	Was Not Investigated		X	
7706370	NYS&W Railway over Renwick Avenue	Was Not Investigated – Access Not Provided		X	

3.0 Inspection Methodology

Watts' personnel conducted the field investigations for the bridges between August 2013 and February 2020. All asbestos investigation and sampling services were performed by NYSDOL certified and US Environmental Protection Agency (USEPA) accredited Asbestos Inspectors.

Due to the nature of the project corridor and the high amount of traffic that flows through on a daily basis, temporary lane restrictions and/or road closures were required for the majority of the bridge and ramp inspections. In addition, the height of many of the structures required the use of a JLG or similar lift to complete the inspection. Whenever possible the asbestos survey work was combined with work that was being performed by C&S Companies and/or Popli Design Group for structural bridge evaluations. Some of these inspections only involved a portion of the structure and did not include inspections of both the deck and substructure.

Lifts and ladders were utilized during some independently performed inspections to survey the underside of certain bridges. Watts also performed additional inspections in conjunction with NYSDOT personnel during biennial bridge inspections performed by DOT staff. However, schedule changes and conflicts, and restrictions with the ability to use State operated equipment, prevented some of these inspections.

Only accessible areas of the bridges were inspected. Inaccessible areas associated with the bridges, such as the bridge approaches and underneath pavement, were not included in this investigation. The presence of suspect ACM in these locations was noted if identified based on the review of record plan information.

Additionally, some bridges had materials that were assumed to be asbestos containing based on the review of record plan drawings but their presence could not be confirmed in the field because either the materials were not visible/could be located or were not identified due to weathering/erosion or previous bridge/roadway renovation work. These materials will continue to be listed in the summary table as assumed ACM based on the historical record plan information.

During the field survey Watts investigated each bridge and ramp for the presence of suspended utility lines and conduits. According to information provided by NYSDOT, there were several bridges that were part of this investigation that have electric utilities carried under the bridge. However, no electrical conduits that were observed were considered a suspect ACM. At some of the bridges, water, gas and/or cable utilities were also present, however no suspect ACM was observed to be associated with any of these utilities. It is recommended that all involved utility companies with the potential for buried utility lines within the project corridor be contacted once the preferred design alternative is determined and there is more accurate information regarding the scope of work for each bridge and the roadways within the project corridor. A copy of Watts' company's license and personnel certification is included in Appendix F.

4.0 Analytical Procedures

A NYSDOL-certified asbestos inspector from Watts collected bulk samples of all suspect ACM that was accessible for each bridge/ramp/roadway. Three (3) representative samples of each homogeneous material were collected in accordance with NYSDOT protocol. Bulk samples were collected using simple hand tools from each matrix identified as a suspect material.

Samples were delivered with the proper chain-of-custody forms to a New York State accredited laboratory that is a participant in the Environmental Laboratory Approval Program (ELAP) and National Voluntary Laboratory Approval Program (NVLAP). Watts utilized both EMSL Analytical in Depew, NY and AmeriSci in Richmond, VA for laboratory analysis. Laboratory accreditation documentation is included in Appendix G.

All bulk samples, except non-friable organically bound (NOB) materials, were analyzed using Polarized Light Microscopy (PLM) using Method 198.1. NOBs, which include, but are not limited to, bituminous coatings; paints; mastics; and caulks, underwent gravimetric reduction and were analyzed by PLM Method 198.6. NOB materials that were found to be negative under PLM were then analyzed by Transmission Electron Microscopy (TEM) Method 198.4. The NYSDOH protocol requires analysis of these materials by TEM if the PLM analysis does not confirm the presence of asbestos.

5.0 Results

The laboratory results indicated that ACM has been identified at the following bridges listed by BIN:

- 1031510 - East Glen Avenue over I-81
- 1031549 - I-81 over Colvin Street
- 103156B - I-81 Ramp to Adams Street
- 1049659 - I-690 over Hiawatha Boulevard
- 1050001 - West Street Southbound over West Genesee Street
- 1050759 - I-690 over North Geddes Street
- 1050779 - I-690 over Leavenworth Street
- 1050780 - West Street Northbound Ramp BB to I-690
- 1050790 - West Street Northbound Ramp DD to I-690
- 105080A - I-690 Westbound Ramp over West Street
- 1050821 - I-690 Westbound over Onondaga Creek (2010 Survey)
- 1050822 - I-690 Westbound over Onondaga Creek (2010 Survey)
- 1050840 - West Street to I-690 Eastbound Ramp (2010 Survey)
- 1050851 - I-690 Westbound over Franklin Street
- 1050852 - I-690 Eastbound over Franklin Street
- 1050910 - I-690 over Salina Street (2012 Survey)
- 1050921 - I-690 Westbound Ramp to I-81 over Willow Street
- 1050922 - I-690 over Willow Street
- 1051000 - I-690 Eastbound over I-81 (1997 Survey)
- 1051030 - I-690 over Townsend Street
- 1051081 - I-690 Westbound over CSX Railroad
- 1051082 - I-690 Eastbound over CSX Railroad
- 1051119 - I-690 over Lodi Street-
- 1051120 - I-481 Northbound over Service Road
- 105113A - I-690 Eastbound Ramp to Teall Avenue
- 1051139 - I-690 over Beech Street
- 1051149 - I-690 over Teall Avenue
- 1051160 - South Midler Avenue over I-690
- 1053840 - I-81 over Erie Street
- 1053860 - I-81 over North Townsend (1997 Survey)
- 1053870 - I-81 Northbound over Townsend
- 1053881 - I-81 Southbound over Willow, James, OGS and State
- 1053882 - I-81 Northbound over Willow, James, OGS and State
- 1053931 - I-690 Westbound over West Bear Street
- 1053932 - I-690 Eastbound over West Bear Street
- 1053941 - I-690 Westbound over Liberty Street
- 1053942 - I-690 Eastbound over Liberty Street
- 1053969 - I-690 over Van Rensselaer Street
- 1054020 - I-690 over North Clinton Street
- 1064590 - I-690 Westbound Ramp to I-81 Southbound (1997 Survey)
- 1064650 - Kinne Road over I-481
- 1064689 - Thompson Road over I-690
- 1064691 - I-690 Westbound over Bridge

- 1064692 - I-690 Eastbound over Bridge
- 1069110 - East Brighton Avenue over I-81 Ramps
- 1093510 - I-690 Service Road over I-481
- 1093520 - I-690 Eastbound Ramp over I-481 Southbound
- 1093530 - I-481 Southbound over I-690 Westbound
- 1093540 - I-690 Eastbound over I-481 Northbound Ramp
- 1093550 - I-481 Northbound over Service Road to I-690
- 1093561 - I-481 Southbound over Manlius Center Road
- 1093562 - I-481 Northbound over Manlius Center Road
- 1093571 - I-481 Southbound over CSX Yard
- 1093572 - I-481 Northbound over CSX Yard
- 1093671 - I-481 Southbound over Kirkville Road
- 1093672 - I-481 Northbound over Kirkville Road
- 1093681 - I-481 Southbound over NYS Thruway 90
- 1093682 - I-481 Northbound over NYS Thruway 90

Detailed information regarding the location, material, approximate quantities, determination of condition, removal options, NYSDOT specification numbers and figures for each bridge that was investigated can be found in the individual Bridge Asbestos Assessment reports located in Appendices B through E. The bridges have been placed into four distinct groups:

- I-481 North Study Area
- I-481 East Study Area
- I-481 South Study Area
- I-81 Viaduct Study Area

Removal, transport, and disposal of ACM would be performed in accordance with federal, state and local regulations, including but not limited to, those of the USEPA, Occupational Safety and Health Administration (OSHA), New York State Department of Environmental Conservation (NYSDEC), NYSDOT and NYSDOL. Applicable regulations include National Emission Standards for Hazardous Air Pollutants promulgated by USEPA and NYSDOL Industrial Code Rule 56.

6.0 Recommend NYSDOT Item Numbers

The identified ACM with the potential to be impacted by the rehabilitation or demolition work would be abated in accordance with applicable federal, state and local regulations. All abatement work should be conducted in accordance with NYSDOL ICR 56 and the appropriate NYSDOT Item Numbers. Based on the ACM that has been identified with these bridges, the following NYSDOT Item Numbers are recommended:

NYSDOT ITEM NUMBERS

Item 210.3411 – Removal and Disposal of Caulking ACM (BV14)

Item 210.3312 – Removal and Disposal of Bond Breaker or Filler ACM (BV14)

Item 210.4812XX – Removal and Disposal of Miscellaneous ACM (BV14) – multiple materials (where XX denotes that items should be serialized for each different material for each structure in accordance with Section 210 of the NYSDOT specifications)

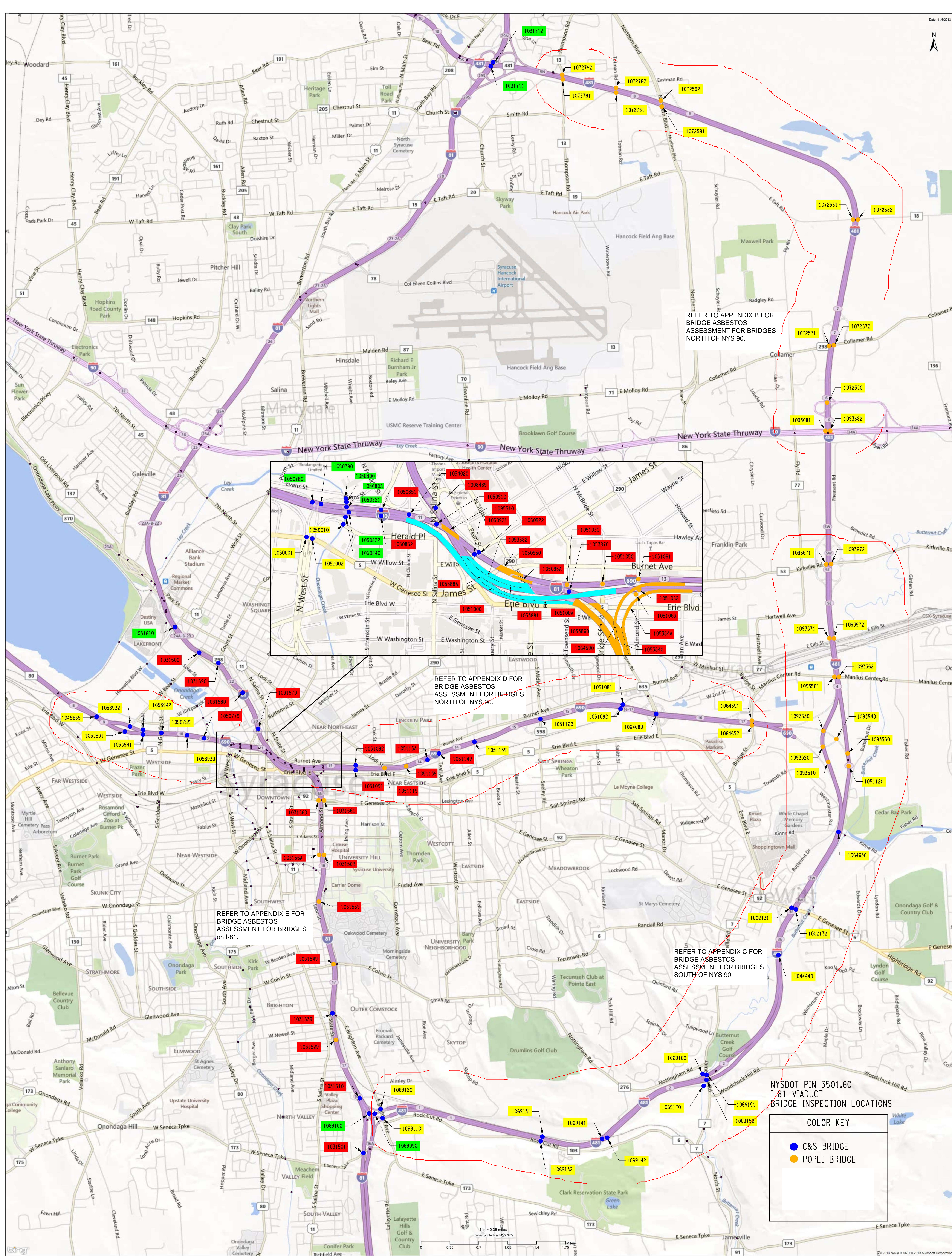
7.0 Limitations

The services described in the report were performed consistent with generally accepted professional principles and practices. This report is for the use and information of our client, unless otherwise noted.

Opinions and recommendations contained in the report apply to conditions existing when services were performed and are intended for our client, within the purposes, conditions, timeframes, and project parameters indicated. Watts cannot be responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services without our further consultation.

The Asbestos Investigation and Assessment Survey assessed the presence of accessible and/or exposed suspect ACMs. Although due diligence was given during this assessment, suspect ACMs may exist behind abutment walls, within the bridge approaches or beneath the existing roadway that were not observed or sampled during the investigation.

APPENDIX A
SITE LOCATION MAP



REFER TO APPENDIX B FOR
BRIDGE ASBESTOS
ASSESSMENT FOR BRIDGES
NORTH OF NYS 90.

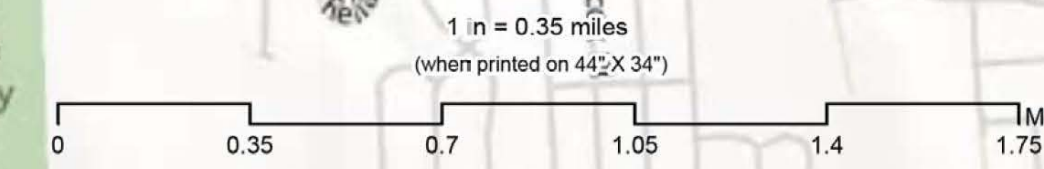
REFER TO APPENDIX D FOR
BRIDGE ASBESTOS
ASSESSMENT FOR BRIDGES
NORTH OF NYS 90.

REFER TO APPENDIX E FOR
BRIDGE ASBESTOS
ASSESSMENT FOR BRIDGES
ON I-81.

REFER TO APPENDIX C FOR
BRIDGE ASBESTOS
ASSESSMENT FOR BRIDGES
SOUTH OF NYS 90.

NYSOT PIN 3501.60
I-81 VIADUCT
BRIDGE INSPECTION LOCATIONS

COLOR KEY	
●	C&S BRIDGE
●	POPLI BRIDGE



APPENDIX F
LICENSES AND CERTIFICATIONS



95 Perry Street, Suite 300
Buffalo, New York 14203

2610 South Salina Street, Suite 2B
Syracuse, New York 13205

New-York State – Department of Labor
Division of Safety and Health
License and Certificate Unit
State Campus, Building 12
Albany, NY 12240

ASBESTOS HANDLING LICENSE

Watts Architecture & Engineering, D.P.C.
Suite 300
95 Perry Street
Buffalo, NY 14203

FILE NUMBER: 12-68007
LICENSE NUMBER: 68007
LICENSE CLASS: RESTRICTED
DATE OF ISSUE: 08/21/2013
EXPIRATION DATE: 09/30/2014

Duly Authorized Representative – Edward Watts

This license has been issued in accordance with applicable provisions of Article 30 of the Labor Law of New York State and of the New York State Codes, Rules and Regulations (12 NYCRR Part 56). It is subject to suspension or revocation for a (1) serious violation of state, federal or local laws with regard to the conduct of an asbestos project, or (2) demonstrated lack of responsibility in the conduct of any job involving asbestos or asbestos material.

This license is valid only for the contractor named above and this license or a photocopy must be prominently displayed at the asbestos project worksite. This license verifies that all persons employed by the licensee on an asbestos project in New York State have been issued an Asbestos Certificate, appropriate for the type of work they perform, by the New York State Department of Labor.

Eileen M. Franko

Eileen M. Franko, Acting Director
For the Commissioner of Labor

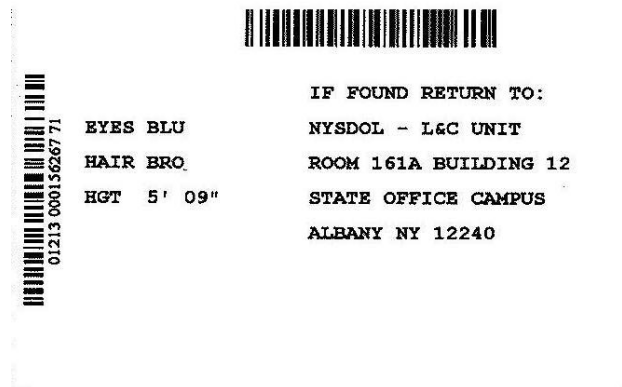
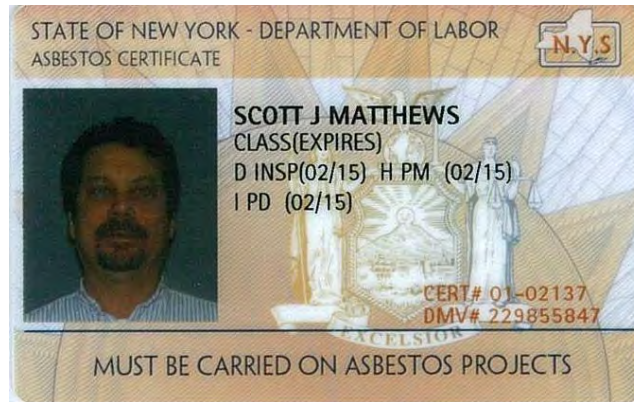
SH 432 (8/12)





95 Perry Street, Suite 300
Buffalo, New York 14203

2610 South Salina Street, Suite 2B
Syracuse, New York 13205



Scott Matthews

C – Air Sampling Technician
D – Inspector
H – Project Monitor
I – Project Designer



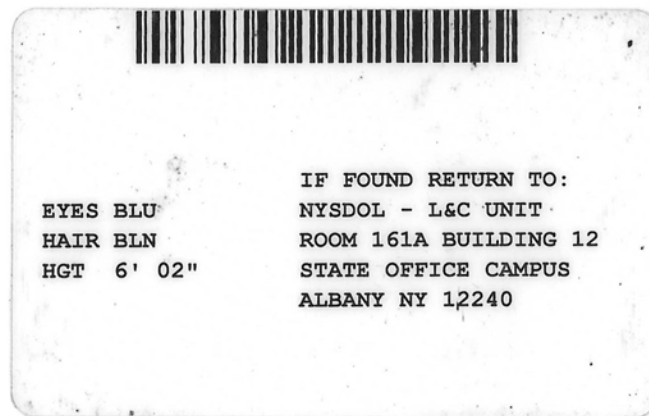
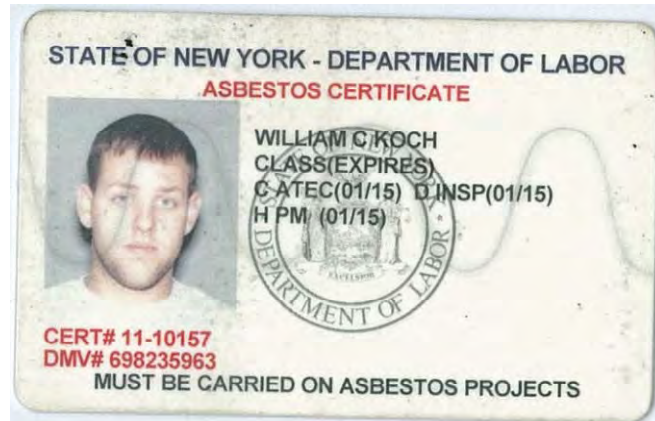
Excellence in all we do.

WATTS Architecture & Engineering



95 Perry Street, Suite 300
Buffalo, New York 14203

2610 South Salina Street, Suite 2B
Syracuse, New York 13205



Will Koch

C – Air Sampling Technician
D – Inspector
H – Project Monitor



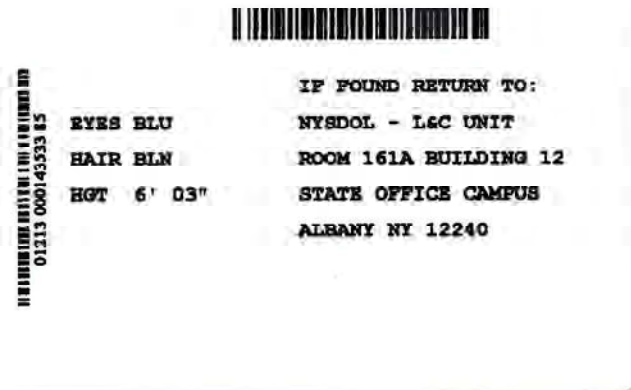
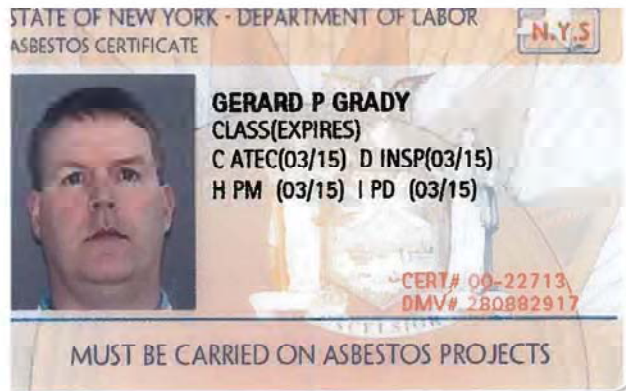
Excellence in all we do.

WATTS Architecture & Engineering



95 Perry Street, Suite 300
Buffalo, New York 14203

2610 South Salina Street, Suite 2B
Syracuse, New York 13205



Jerry Grady

C – Air Sampling Technician
D – Inspector
H – Project Monitor
I – Project Designer



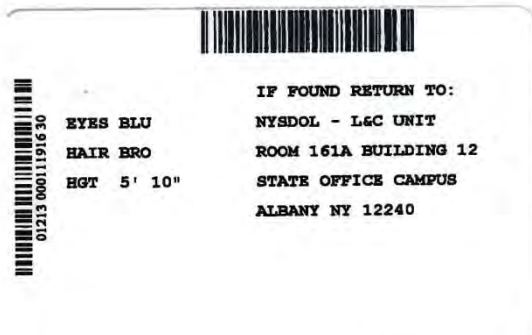
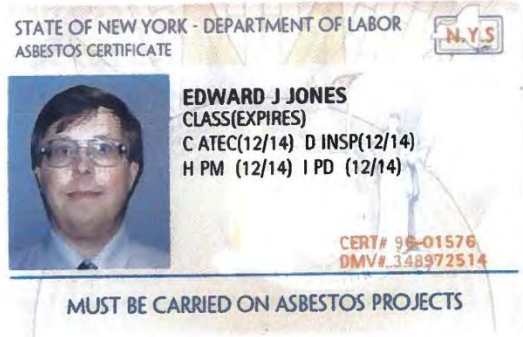
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Buffalo, New York 14203

2610 South Salina Street, Suite 2B
Syracuse, New York 13205



Edward Jones

C – Air Sampling Technician
D – Inspector
H – Project Monitor
I – Project Designer



Excellence in all we do.

WATTS Architecture & Engineering

APPENDIX G
LABORATORY ACCREDITATION

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER



Expires 12:01 AM April 01, 2015
Issued April 01, 2014

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

DR. THOMAS MCKEE
AMERISCI RICHMOND
13635 GENITO RD
MIDLOTHIAN, VA 23112

NY Lab Id No: 10984

is hereby APPROVED as an Environmental Laboratory for the category
ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved subcategories and/or analytes are listed below:

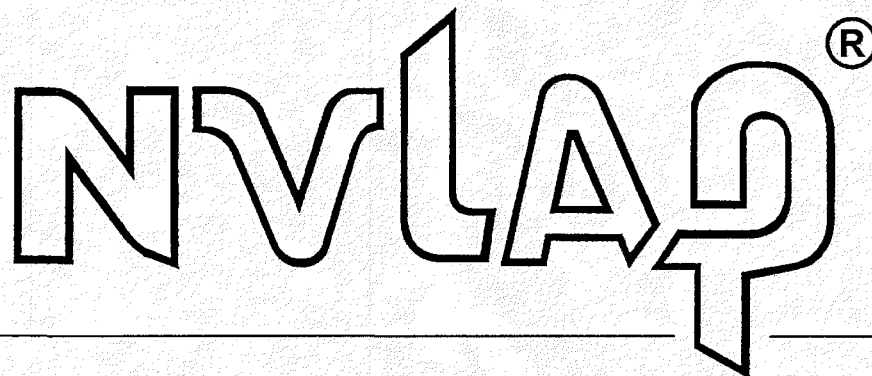
Miscellaneous

Asbestos in Friable Material	Item 198.1 of Manual EPA 600/M4/82/020
Asbestos in Non-Friable Material-PLM	Item 198.6 of Manual (NOB by PLM)
Asbestos in Non-Friable Material-TEM	Item 198.4 of Manual

Serial No.: 50469

Property of the New York State Department of Health. Certificates are valid only at the address shown, must be conspicuously posted, and are printed on secure paper. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify the laboratory's accreditation status.

United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 101904-0

AmeriSci Richmond
Midlothian, VA

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

BULK 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).*

2013-07-01 through 2014-06-30

Effective dates



A handwritten signature in black ink, appearing to read "William R. Mulled".

For the National Institute of Standards and Technology



National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

AmeriSci Richmond
dba AmeriSci Richmond
13635 Genito Road
Midlothian, VA 23112
Mr. Thomas B. Keith
Phone: 804-763-1200 Fax: 804-763-1800
E-Mail: bkeith@amerisci.com
URL: <http://www.amerisci.com>

BULK ASBESTOS FIBER ANALYSIS (PLM)

NVLAP LAB CODE 101904-0

<i>NVLAP Code</i>	<i>Designation / Description</i>
18/A01	EPA 600/M4-82-020: Interim Method for 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

2013-07-01 through 2014-06-30

Effective dates

For the National Institute of Standards and Technology

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER



Expires 12:01 AM April 01, 2015
Issued April 01, 2014

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MS. RHONDA R. MCGEE
EMSL ANALYTICAL INC
490 ROWLEY ROAD
DEPEW, NY 14043

NY Lab Id No: 11606

is hereby APPROVED as an Environmental Laboratory for the category
ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved subcategories and/or analytes are listed below:

Miscellaneous

Asbestos in Friable Material	Item 198.1 of Manual EPA 600/M4/82/020
Asbestos in Non-Friable Material-PLM	Item 198.6 of Manual (NOB by PLM)
Asbestos in Non-Friable Material-TEM	Item 198.4 of Manual

Serial No.: 50708

Property of the New York State Department of Health. Certificates are valid only at the address shown, must be conspicuously posted, and are printed on secure paper. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify the laboratory's accreditation status.

United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 200056-0

EMSL Analytical, Inc.
Depew, NY

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

BULK 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).*

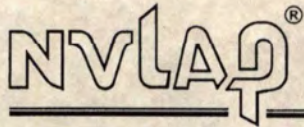
2014-07-01 through 2015-06-30

Effective dates



A handwritten signature in black ink, appearing to read "William R. Mallon".

For the National Institute of Standards and Technology



**National Voluntary
Laboratory Accreditation Program**



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

EMSL Analytical, Inc.

490 Rowley Road

Depew, NY 14043

Ms. Rhonda McGee

Phone: (716) 651-0030 Fax: (716) 651-0394

E-Mail: rmcgee@emsl.com

URL: <http://www.emsl.com/>

AIRBORNE ASBESTOS FIBER ANALYSIS (TEM)

NVLAP LAB CODE 200056-0

NVLAP Code Designation / 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.
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2014-07-01 through 2015-06-30

Effective dates

For the National Institute of Standards and Technology