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# HALEY& ALDRICH

### Letter of Transmittal

Date	31 March 2006					
File Number						
From	Ed Hynes					
То	Steuben Glass HP-ST-01 1 Steuben Way Corning, New York 14831					
Attention	Jesse Kendall					
Subject	Report					
Copies	Date	Description				
2	3/06	Survey for Asbestos Containing Materials Steuben Glass Facility Fulton Street Corning, New York				
Transmitted via	☐ First class	mail ⊠ Overnight express □ Hand delivery □ Other				
Remarks						

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31 March 2006 File No. 33198-000

Steuben Glass HP-ST-01 1 Steuben Way Corning, New York 14831

Attention:

Mr. Jesse Kendall

Facilities Supervisor

Subject:

Asbestos Inspection Report Steuben Fulton Street Facility

Corning, New York

OFFICES

Boston *Massachusetts* 

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Dayton Ohio

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Portland *Maine* 

Providence Rhode Island

San Diego California

Santa Barbara California

Tucson Arizona

Washington District of Columbia Gentlemen:

Haley & Aldrich of New York (Haley & Aldrich) is pleased to submit the attached duplicate copies of the above referenced report. These reports are provided in accordance with our proposal dated 3 March 2006 and Corning Incorporated purchase order 0000004858. We appreciate the opportunity to have provided assistance on this project. Please do not hesitate to contact us if there are any questions regarding this report.

Sincerely yours,

HALEY & ALDRICH OF NEW YORK

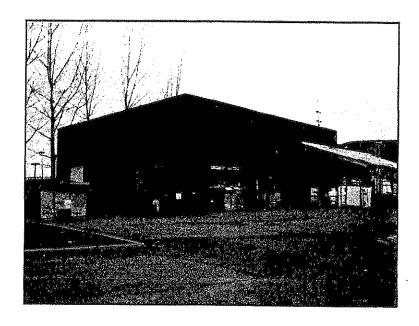
Edward L. Hynes

Vice President



Steuben Glass Fulton Street Building Corning, New York 14830

CONDUCTED: March 20th, 2006



### PREPARED FOR:

Haley & Aldrich of New York 200 Town Centre Drive, Suite 200 Rochester, New York 14623

#### PREPARED BY:

Certified Environmental Services, Inc. 1401 Erie Boulevard East Syracuse, New York 13210

SUBMITTED: March 30th, 2006



# TABLE OF CONTENTS

TOPIC	<b>SECTION</b>	<u>PAGE</u>
Project Overview	Ι	1
Methodologies	П	2
Summary of Findings and Discussion	Ш	5
Conclusions & Recommendations	IV	10

### Appendix A

Site Location Map

### Appendix B

Project Diagrams

### Appendix C

Representative Project Photographs

### Appendix D

Homogenous Area Listing

### Appendix E

NYSDOL Asbestos Handling License

### Appendix F

NYSDOL Asbestos Inspector Certificates

### Appendix G

Laboratory Analysis Reports

#### Appendix H

NYSDOH-ELAP Laboratory Certificates

### Appendix I

NYSDOL Pre-Demolition Survey Guidelines



# **SECTION I - Project Overview**

In accordance with a request made by Mr. Edward Hynes, Vice President of Haley & Aldrich of New York, Certified Environmental Services, Incorporated performed an asbestos survey for the Steuben Glass - Fulton Street Building located along Fulton Street in the City of Corning, Steuben County, New York 14830. The structure included one (1) floor and encompasses an estimated gross floor area of approximately eight-thousand square feet (8,000 ft²). The referenced structure was generally observed to be in good condition and well maintained at the time of inspection efforts performed by CES.

Appendix A of this report includes a Site Location Map indicating the general location of the property within the City of Corning. Appendix B includes project diagrams prepared by CES detailing the layout of the structure and Appendix C includes representative project photographs taken during site inspection activities.

Based on information provided to CES, the property is owned and occupied by Steuben Glass. Mr. Edward Haynes of Haley & Aldrich of New York facilitated access to the structure to allow CES personnel to complete the required inspection and sample collection activities.

## Project services provided by CES included the following:

- Inspection of the subject property by a New York State Department of Labor (NYSDOL) certified asbestos Inspector.
- The collection of bulk samples of materials suspected to potentially contain asbestos with subsequent analysis by New York State Department of Health (NYSDOH) approved laboratories.
- Preparation of this project report.

Asbestos survey services, which were completed to determine the presence or absence of asbestos-containing materials (ACM) in association with the subject structure, were performed by New York State Department of Labor certified Inspector Matthew L. Walker (NYSDOL Certificate of Asbestos Safety Training No. 447548) of CES on March 20<sup>th</sup>, 2006. This report summarizes the methods and procedures employed in the performance of the survey, and provides a summary of findings based on the completed inspection, sampling and analytical testing services.



# **SECTION II - Methodologies**

### Inspection Procedures:

The inspection was carried out in general accordance with the requirements outlined in the New York State Department of Labor's (NYSDOL) asbestos regulation (12 NYCRR Part 56) as specified in SubPart 56-5, Section 56-5.1(e)(1) and (2). This section of the regulation states the following:

- (e) Building/Structure Asbestos Survey Requirements. The asbestos survey shall include a thorough inspection for and identification of all Presumed Asbestos Containing Material (PACM), PACM, suspect miscellaneous asbestos containing material (ACM), or asbestos material throughout the building/structure or portion thereof to be demolished, renovated, remodeled, or to have repair work. The required inspection shall be performed by a certified asbestos inspector, and, at a minimum, shall include identification of PACM, suspect miscellaneous ACM or asbestos material by all of the following methods:
  - The review of building/structure plans and records, if available, for references to asbestos, ACM, PACM, suspect miscellaneous ACM or asbestos material used in construction, renovation or repair; and
  - (2) A visual inspection for PACM and suspect miscellaneous ACM throughout the building/structure or portion thereof to be demolished, renovated, remodeled or repaired. For the purpose of this Part, all PACM and suspect miscellaneous ACM visually assessed shall be treated and handled as ACM and shall be assumed to be ACM, unless bulk sampling is conducted per this Section, standard EPA and OSHA accepted methods, including multi-layered systems sampling protocols; the subsequent analyses are performed by a laboratory that meets the requirements of Section 56-4.2 of this Part; and the analyses satisfies both ELAP and federal requirements, including multi-layered sample analyses, to document non-asbestos containing material.

Each accessible room or area associated with the structure was visually inspected. Materials suspected to potentially contain asbestos were identified, quantified, and sampled for subsequent laboratory analysis. Project diagrams were prepared to assist the report user in locating asbestos-containing materials (ACM) identified as a result of CES's completed inspection. Estimated quantities of ACM identified by CES during the inspection were obtained using measurements made in the field by inspection personnel. Please note that all quantities are provided as estimates only and should be verified by the abatement contractor or contractors solicited to provide pricing for any necessary abatement activities as part of their subsequent bid/proposal.

The Inspector physically assessed each suspect material to determine whether it represented a friable, non-friable or non-friable organically bound (NOB) material. Bulk samples of each suspect material were then collected for subsequent laboratory analysis. A total of fifty-four (54) bulk samples (CES



Log Nos. 435238 through 435291) were collected on March 20<sup>th</sup>, 2006 and analyzed as part of the completed inspection.

### Analytical Procedures:

Polarized Light Microscopy (PLM) analytical services were completed by Certified Environmental Services, Inc. (NYSDOH-ELAP No. 11246). Transmission Electron Microscopy (TEM) services were completed by AMA Analytical Services, Inc., 4475 Forbes Boulevard, Lanham, Maryland 20706 (NYSDOH ELAP No. 10920).

## Friable and Non-Friable Bulk Samples

Friable and non-friable bulk samples collected during the inspection were analyzed using the Stratified Point Count Method with Polarized Light Microscopy and Dispersion Staining (PLM/DS) techniques. Samples are first examined for homogeneity and preliminary fiber identification using a low powered stereoscopic binocular microscope. Positive identification of suspect fibers is made using the Polarized Light Microscope. In the event that discrete strata are identified in a sample, each is analyzed and the amount of asbestos quantified in that layer only. The results for each layer are then combined to yield an estimate of the asbestos content for the whole sample.

# Non-Friable Organically Bound (NOB) Samples

Non-Friable Organically Bound (NOB) materials were analyzed in accordance with New York State Department of Health (NYSDOH) Methods 198.6 and 198.4. Samples were first prepared via Gravimetric Matrix Reduction and analyzed using Polarized Light Microscopy (GMR/PLM). Samples for which the GMR/PLM procedure did not indicate the presence of greater than one percent (1%) asbestos were submitted for further evaluation by Transmission Electron Microscopy (TEM) analysis. NYSDOH-ELAP requirements mandate that before NOB materials can be considered or treated as non-asbestos containing, confirmation by the quantitative TEM procedures is required.

Copies of the New York State Department of Health Environmental Laboratory Approval Program (NYSDOH-ELAP) Certificates of Approval for Certified Environmental Services, Inc. and AMA Analytical Services, Inc. are provided as Appendix H of this report.

Subpart 56-5.1(f) states that the certified asbestos inspector shall, at a minimum, identify and assess with due diligence, the locations, quantities, friability and conditions of all types of installations at the affected portion of the building/structure relative to the ACM, suspect miscellaneous ACM, PACM or asbestos material contained therein, including the following summarized list of typical ACMs:

# PRESUMED ASBESTOS CONTAINING MATERIALS (PACM)

- a) Fireproofing
- b) Acoustical Plaster
- c) Finish Plasters
- d) Skim Coats of Joint Compound

# THERMAL SYSTEM INSULATION (TSD)

- a) Equipment Insulation
- b) Boiler, Breeching, Boiler Rope, Duct or Tank Insulation, Cement or Mortar Used for Boilers and Refractory Brick
- c) Piping and Fitting Insulations including but not limited to, Wrapped Paper, Aircell, Millboard, Rope, Cork, Preformed Plaster, Job Molded Plaster and coverings over fibrous glass insulation

# SUSPECT MISCELLANEOUS ACM (Roofing und Siding Materials)

- a) Insulation Board
- b) Vapor Barriers
- c) Coatings
- d) Non-Metallic or Non-Wood Roof Decking
- e) Felts
- f) Cementitious Board (Transite)
- g) Flashing
- h) Shingles
- I) Galbestos

# OTHER MISCELLANEOUS MATERIALS

- a) Dust and Debris
- b) Floor Tile
- c) Cove Base
- d) Floor Leveler Compound
- e) Ceiling Tile
- f) Vermiculite Insulation
- g) Gaskets, Seals Sealants
- h) Vibration isolators
- I) Laboratory Tables and hoods
- j) Chalkboards
- k) Pipe Penetration Packing/Firestop Materials
- 1) Cementitious Board
- m) Electrical Wire Insulation
- n) Fire Curtains

- o) Fire Blankets
- p) Fire Doors
- q) Brakes and Clutches
- r) Mastics, Adhesives and Glues
- s) Caulks
- t) Sheet Flooring (Linoleum)
- u) Wallpaper
- v) Drywall
- w) Plasterboard
- x) Spackling/Joint Compound
- y) Textured paint
- z) Grout
- aa) Glazing Compound
- bb) Terrazzo



# **SECTION III - Summary of Findings & Discussion**

Several homogenous areas (i.e. an area of surfacing material, thermal system insulation material, or miscellaneous material that is uniform in color and texture) associated with the subject structure was identified to be asbestos-containing (i.e. containing greater than one-percent asbestos) as a result of inspection efforts completed by CES. A summary of those homogenous areas determined to be asbestos-containing through laboratory analysis, including information relative to ACM locations, estimated quantities, friability and condition, is provided below. A complete listing of homogenous areas identified by CES, identifying which ones were found to be ACM and which ones were found to be non-ACM, has been included as Appendix D.

# HOMOGENOUS AREAS IDENTIFIED TO BE ASBESTOS CONTAINING

HOMOGENOUS AREA (Material)	ACM? (Yes or No)	LOCATION(S)	QTY (Ft² or Lf)	FRIABILITY (F, NF, NOB)	CONDITION
EXTERIOR		an section of the contract			
Black Flashing Material w/ Paper Mesh	Yes	Roof Area R-1	5 Ft <sup>2</sup>	NOB	Good
Gray Caulk (around block window)	Yes	Exterior - West	36 LF	NOB	Good
White Perimeter Window Caulk	Yes	Exterior - West	16 LF	NOB	Good
Green Perimeter Window Caulk	Yes	Exterior - North Exterior - East Exterior - South	8 LF 55 LF 25 LF	NOB	Good
White Perimeter Door Caulk	Yes	Exterior - North	38 LF	NOB	Good
Black Paint	Yes	Exterior on Block Walls	~8,000 Ft <sup>2</sup>	F	Poor / Fair
INTERIOR					
Black Paper (to Fiberglass Pipe Insulation)	Yes	Area 1-1 & Area 1-2	130 LF	NOB	Good
9"x9" Butterscotch Mottled Floor Tile	Yes	Area 1-3	240 Ft <sup>2</sup>	NOB	Fair
Red Caulk (around block window)	Yes	Area 1-4 Area 1-17	6 LF 25 LF	NOB	Good



HOMOGENOUS AREA (Material)	ACM? (Yes or No)	LOCATION(S)	QTY (Et <sup>2</sup> or Lf)	FRIABILITY (F. NF. NOB)	CONDITION
INTERIOR					
9"x9" Brown / White Floor Tile and Mastic (painted in some areas)	Yes	Area 1-7 Area 1-9 Area 1-10 Area 1-12 Area 1-13 Area 1-14 Area 1-15 Area 1-16 Area 1-17 Area 1-18 (on stairs)	55 Ft <sup>2</sup> 90 Ft <sup>2</sup> 250 Ft <sup>2</sup> 190 Ft <sup>2</sup> 160 Ft <sup>2</sup> 310 Ft <sup>2</sup> 210 Ft <sup>2</sup> 310 Ft <sup>2</sup> 400 Ft <sup>2</sup> 5 Ft <sup>2</sup>	NOB	Good
Dark Brown Baseboard Moulding Mastic	Yes	Area 1-7 Area 1-13 Area 1-14 Area 1-15	7 LF 45 LF 60 LF 40 LF	NOB	Good

Appendix B includes project diagrams prepared by CES detailing the layout of the structure and associated locations of asbestos-containing materials and Appendix C includes representative project photographs taken during site inspection activities.

#### NOTES:

- 1. Ft<sup>2</sup> = Square Feet, LF = Linear Feet, Ea = Each
- 2. F = Friable, NF = Non-Friable, NOB = Non-Friable Organically Bound
- 3. Area numbers listed under the location column refer to area numbers designated on the applicable project diagrams included in Appendix B. A complete listing of homogenous areas identified by CES, identifying which ones were found to be ACM and which ones were found to be non-ACM, has been included as Appendix D.
- 4. During the asbestos inspection, CES personnel noted the presence of newer vinyl-coated electrical wire insulation in the building. This type of wire insulation is not typically considered to be a suspect asbestos-containing material. In addition, due to the fact that power to the structure was live, and the structure was currently being occupied and utilized by the owner, CES personnel did not attempt to collect samples of electrical wire insulation for laboratory analysis. A more thorough assessment of the electrical wire insulation associated with the structure should be performed prior to the renovation or demolition of the structure.
- All quantities for identified asbestos-containing materials listed above are estimates only and are to be verified by the abatement contractor or contractors solicited to provide pricing for any necessary abatement activities as part of their subsequent bid/proposal.

The asbestos-containing homogenous areas identified as a result of asbestos survey services completed by CES are described in greater detail as follows:



## A. BLACK FLASHING MATERIAL W/ PAPER MESH

CES personnel identified and quantified approximately five square feet (5 Ft<sup>2</sup>) of asbestos-containing black flashing material with paper mesh on Roof Area R-1. The flashing was observed on five (5) separate locations along the perimeter of the roof. This type of flashing material is generally considered to be a non-friable organically bound material. The flashing was observed to be intact and in good condition.

#### B. GRAY CAULK

CES personnel identified and quantified a total of approximately thirty-six linear feet (36 LF) of gray caulk around the perimeter of a block style window on the western exterior of the structure. This type of caulk is typically considered to be a non-friable organically bound material and was noted to be in good condition at the time of CES's inspection.

# C. GREEN & WHITE PERIMETER WINDOW CAULK

CES personnel identified and quantified a total of approximately one-hundred four linear feet (104 LF) of green and white window caulk around the perimeter of several windows on the northern, southern and eastern exterior of the structure. This type of caulk is typically considered to be a non-friable organically bound material and was noted to be in good condition at the time of CES's inspection. All exterior caulk on windows associated with the structure should be treated as asbestos containing. Please note that not all windows associated with the structure actually have caulk material present, accounting for the relatively low quantity of caulk identified.

# D. WHITE PERIMETER DOOR CAULK

CES personnel identified and quantified a total of approximately thirty-eight linear feet (38 LF) of white caulk around the perimeter of a door located on the northern side of the structure. This type of door caulk is typically considered to be a non-friable organically bound material and was noted to be in good condition at the time of CES's inspection.

## E. BLACK PAINT

CES personnel identified and quantified approximately eight-thousand square feet (8,000 Ft²) of asbestos-containing black paint on the block exterior walls of the structure, which appeared to be the same or similar in all areas of the block exterior surface. This type of paint is generally considered to be a non-friable material. However, areas of the painted surface were noted to be flaking and therefore in friable condition. Only one (1) sample of the paint was collected from the southern exterior of the structure. As such, additional sampling may assist in determining if the entire exterior of the structure is covered with asbestos-containing paint.



# F. BLACK PAPER (to fiberglass pipe insulation)

Approximately one-hundred thirty linear feet (130 LF) of asbestos-containing black paper to fiberglass pipe insulation was identified in Areas 1-1 and 1-2 (suspended from the metal deck ceiling) in the northern portion of the structure. The black paper was noted to be the outermost layer of the fiberglass pipe insulation. This type of paper coating is generally considered to be a non-friable organically bound material and was noted to be in good condition at the time of CES's inspection.

## G. 9"x9" FLOOR TILE & MASTIC

Asbestos-containing 9"x9" floor tile and mastic (excluding the mastic in Area 1-3) was identified throughout the structure over concrete flooring. CES identified and quantified approximately two-thousand two-hundred square feet (2,200 Ft²) of the various floor tiles and mastics. These types of floor tiles and mastics are typically considered to be non-friable organically bound materials. In general, the floor tiles and mastics were observed to be intact and in good condition at the time of inspection efforts completed by CES. Please note the 9"x9" floor tile was noted to be painted in many of the areas.

### H. RED CAULK

CES personnel identified and quantified thirty-one linear feet (31 LF) of red caulk around the perimeter of a block style window located in Areas 1-4 and 1-17. This type of caulk is typically considered to be a non-friable organically bound material and was noted to be in good condition at the time of CES's inspection.

# I. DARK BROWN BASEBOARD MOULDING MASTIC

CES personnel identified and quantified a total of approximately one-hundred fifty linear feet (150 LF) of asbestos-containing dark brown baseboard moulding mastic in Areas 1-7, 1-13, 1-14 and 1-15. This type of mastic is typically considered to be a non-friable organically bound material. In general, the baseboard and associated dark brown mastic was observed to be intact and in good condition at the time of inspection efforts completed by CES.

No additional asbestos-containing materials were identified by CES to be associated with the Steuben Glass - Fulton Street Building located along Fulton Street in the City of Corning, Steuben County, New York 14830. To the best of our knowledge and belief, the asbestos-containing materials identified by CES, as summarized in this report, represent all asbestos-containing materials associated with the subject structure.



#### Unidentified and Unassessed Asbestos

Subpart 56-5.1(j) of the NYSDOL's asbestos regulation states that when any construction activity, such as demolition, remodeling, renovation or repair work, reveals PACM or suspect miscellaneous ACM that has not been identified by the asbestos survey per this Part, or has not been identified by other inspections as per current OSHA or EPA requirements, all activities shall cease in the area where the PACM or suspect miscellaneous ACM is found and the Asbestos Control Bureau shall be notified by telephone by the building/structure owner or their representative, followed with a written notice in accordance with the notification requirements of this Part. Unassessed PACM or suspect miscellaneous ACM shall be treated and handled as ACM and assumed to be ACM, unless proven otherwise by standard EPA and OSHA accepted methods, including multi-layered systems sampling protocols; subsequent analyses performed by a laboratory that meets the requirements of Section 56-4.2 of this Part; and the analyses satisfies both NYS ELAP and federal requirements, including multi-layered sample analyses, to document non-asbestos containing material.



# **SECTION IV - Conclusions & Recommendations**

### Typical Remedial Measures:

Listed below are the four (4) most common remedial actions generally available to prevent or limit the release of asbestos fibers from ACM.

- 1) <u>Implementation of an Operations & Maintenance (O&MI) program:</u> Under this response action, a set of standard operating procedures is developed for use by in-house maintenance personnel. These procedures are developed to assist designated personnel in the clean-up of fibers previously released and to limit the potential for future asbestos exposure by instituting preventative measures (i.e. personnel training, material repair, special clean-up procedures, etc.).
- 2) Encapsulation: Utilization of this remedial action is intended to limit potential fiber release by chemical means. This is accomplished by creating an impermeable barrier between the material and the environment with a bridging encapsulant, or by using a penetrating encapsulant which binds the material and its fibers together in a hard matrix.
- 3) Enclosure: Enclosure of asbestos consists of constructing a permanent, physical, airtight impermeable barrier between the ACM and the environment. This is accomplished using material such as cement block, gypsum board, tongue and groove or spline jointed plywood, etc.
- 4) Removal: Removal of asbestos is the process by which ACM is stripped from its underlying substrate. Removal must be completed in a controlled manner to prevent building contamination. When completed properly, removal of ACM offers a permanent solution to the ACM problem by eliminating the material. However, removal can be very costly and time consuming. When done improperly, removal can result in significant contamination of a building or area and dramatically increase the potential for building occupants exposure to airborne asbestos fibers.

Determining an appropriate remedial action is typically based on a hazard assessment which is prepared for ACM identified as a result of a completed building survey. These hazard assessments are generally based on several factors including the following:

- 1. Whether or not the material is friable;
- 2. The condition of the material (e.g. poor, fair, good);
- 3. The potential for disturbance of the material;
- 4. Activity in the area of the material (e.g. manufacturing processes, air movement, etc.);
- 5. Whether or not the area where the material is located is occupied.



### Please refer to the following appendices for additional information and project documentation:

Appendix A
Site Location Map

Appendix B
Project Diagrams

Appendix C
Representative Project Photographs

Appendix D
Homogenous Area Listing

Appendix E
NYSDOL Asbestos Handling License

Appendix F
NYSDOL Asbestos Inspector Certificates

Appendix G
Laboratory Analysis Reports & Bulk Sample Data Sheets

Appendix H
NYSDOH Laboratory Certificates of Approval

Appendix G
NYSDOL Pre-Demolition Asbestos Survey Guidelines

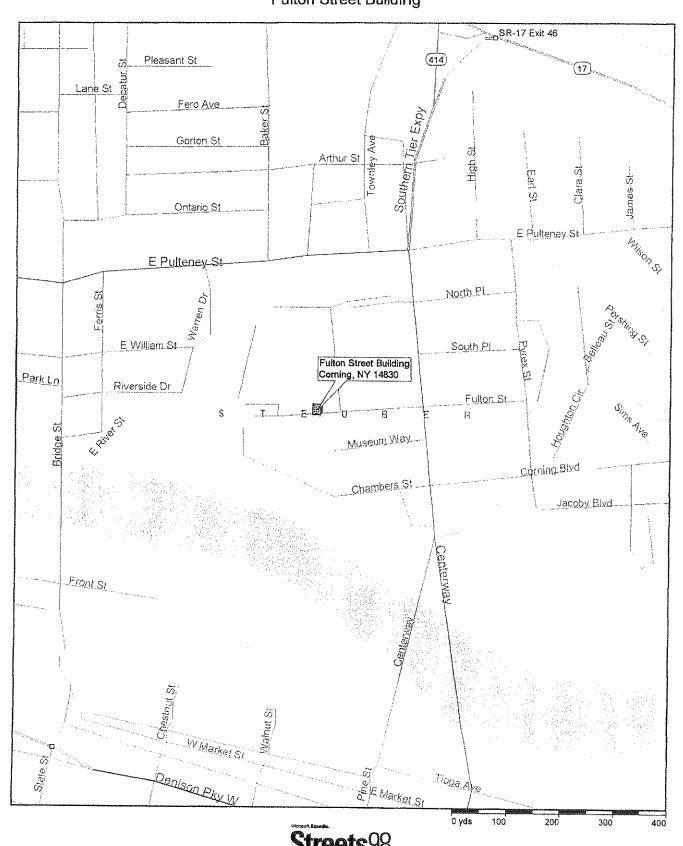
Any questions regarding the information contained in this report should be directed to Matthew L. Walker of Certified Environmental Services, Inc. at (315) 478-2374, extension 303.



# APPENDIX A

Site Location Map

# Site Location Map Fulton Street Building

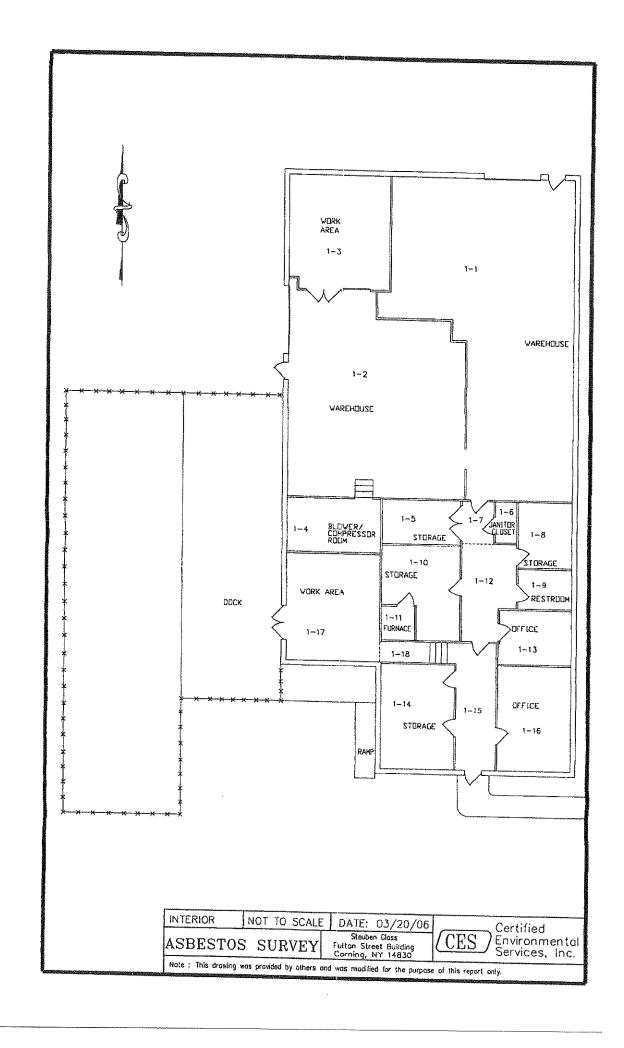


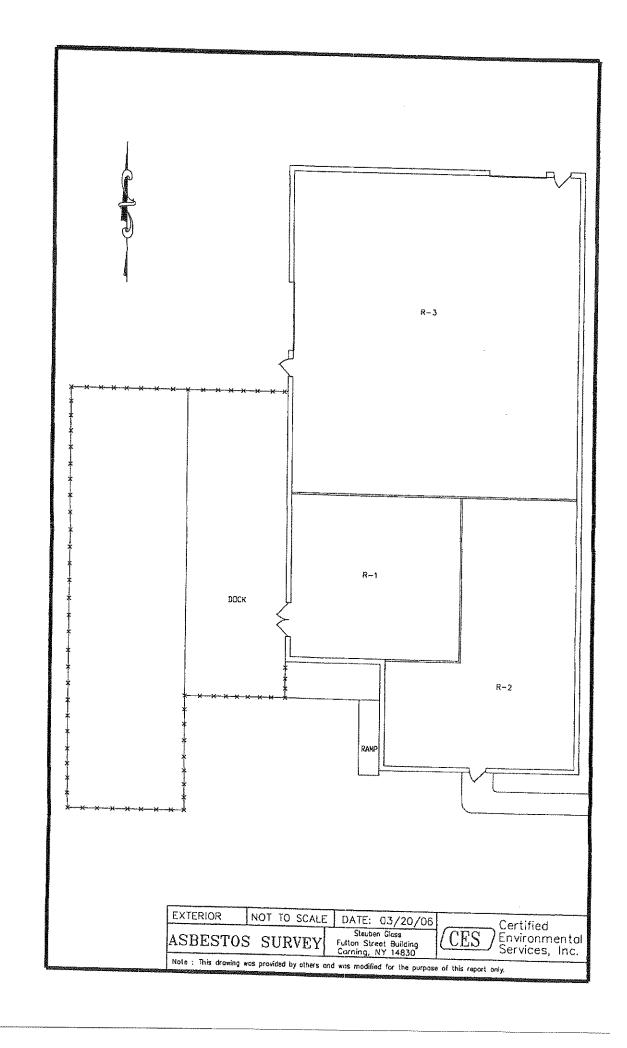
Copyright © 1988-1997, Microsoft Corporation and/or its suppliers. All rights reserved. Please visit our web site at http://maps.expedia.com.



# APPENDIX B

Project Diagrams





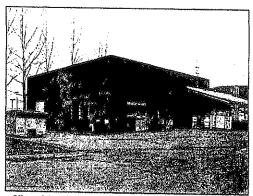


# APPENDIX C

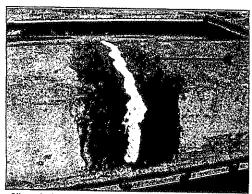
Representative Project Photographs ASBESTOS SURVEY: Steuben Glass - Fulton Street Building Fulton Street - Corning, New York 14830

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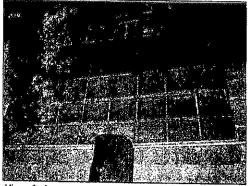
# REPRESENTATIVE PROJECT PHOTOGRAPHS



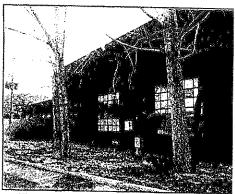
View of the subject structure, facing generally southeast from Fulton Street.



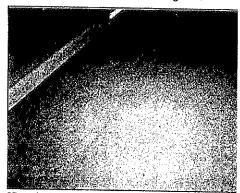
View of asbestos-containing flashing material with paper mesh located at five (5) separate locations along the perimeter of Roof Area R-1.



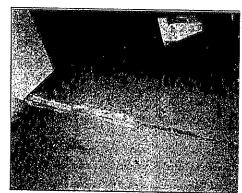
View of asbestos-containing red caulk located on the interior side of the block window located in Area 1-4 and 1-17.



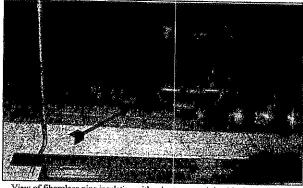
View of windows along the eastern exterior of the subject structure with asbestos-containing caulk.



View of painted and unpainted asbestos-containing 9"x9" brow white floor tile and associated mastic.



View of asbestos-containing 9"x9" butterscotch floor tile locat in Area 1-3.



View of fiberglass pipe insulation with asbestos-containing black paper layer.



# APPENDIX D

Homogenous Area Listing