

March 10, 2021

Mr. Mark Carpenter, P.E.  
District 12 Environmental Engineer  
5500 Transportation Blvd  
Garfield Hts., Ohio 44125

Re: **CUY-BH-FY2023 Misc (PID 105909) Asbestos Survey**  
**CUY-480-0.000, I-480/71 ramp over I-480 Mainline**  
**SFN 1814249**

Dear Mr. Carpenter,

EnviroScience, Inc. was contracted by the Ohio Department of Transportation to provide an asbestos survey of the CUY-480-0.000 bridge structure over Interstate 480. The bridge location coordinates are 41.42056, -81.81583.

The 348-foot long four-span continuous steel beam bridge with reinforced concrete deck and substructure will undergo replacement. Bridge inventory report information indicates the structure to have been originally built in 1980. A site location map is included in Appendix A.

#### Asbestos Regulations and Definitions

Prior to the demolition or renovation of a structure (including bridge structures), an asbestos inspection must be conducted by a licensed asbestos hazard evaluation specialist in accordance with National Emissions Standard for Hazardous Air Pollutants (NESHAP) Guidelines, EPA Regulation 40 CFR, Subpart M, Part 61 and OEPA asbestos regulations (OAC 3745-20). Further, the Occupational Safety and Health Administration's (OSHA's) Asbestos Standard for the Construction Industry (29 CFR 1926.1101) regulates all renovation and demolition work involving building materials which contain any amount of asbestos.

NESHAP, OEPA, and OSHA asbestos regulations define asbestos-containing material (ACM) as any material containing greater than one (1) percent asbestos as determined by polarized light microscopy. NESHAP regulations require that all materials suspected of containing asbestos be sampled to determine asbestos content or be assumed to be an ACM and, therefore, treated as such. Materials that are determined or assumed to be ACMs shall be quantified and assessed by a licensed inspector. The materials then shall be characterized and assigned one of the following designations: Friable, Category I Non-friable, and Category II Non-friable.

Friable ACM is defined by the Asbestos NESHAP regulations as any material containing more than one percent (1%) asbestos as determined using the method specified in Appendix E, Subpart E, 40 CFR Part 763, Section 1, Polarized Light Microscopy (PLM), that, when dried, can be crumbled, pulverized, or reduced to powder by hand pressure.

Non-friable ACM is any material containing more than one percent (1%) asbestos as determined using the method specified in Appendix E, Subpart E, 40 CFR Part 763, Section 1, Polarized Light Microscopy (PLM), that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure. Non-friable ACM can remain on the structure during renovation/demolition if it will not be sanded, grinded, cut, abraded, or made friable by any means. The two categories of non-friable ACM are described as follows:



5070 Stow Road  
Stow, OH 44224

- Category I Non-friable ACM - asbestos-containing packing, gaskets, resilient floor covering, and asphalt roofing products.
- Category II Non-friable ACM - any asbestos-containing material excluding Category I Non-friable ACM.

Regulated ACM (RACM) is defined as:

- Friable asbestos material.
- Category I Non-friable ACM that has become friable.
- Category I Non-friable ACM that has been or will be involved in sanding, grinding, cutting, or abrading.
- Category II Non-friable ACM that has a high probability of becoming crumbled, pulverized, or reduced to powder by forces expected to act on the material during renovation or demolition.

### Asbestos Survey Summary

Bridge Plan Review- Prior to the field survey, EnviroScience performed a limited review of available bridge construction plans that were compiled by the department and placed on ODOTs FTP site. Based on our review of portions of CUY-480-0.000 plans a 2” electric conduit for lighting was depicted running withing the northwest parapet. The conduits may have the potential to contain asbestos but are encased in the parapet concrete. No other conclusive evidence of suspect ACM was noted.

Asbestos Survey- An asbestos survey of the subject bridge structure was conducted on 01/13/21 by C.E. Kessler, Certified Asbestos Hazard Evaluation Specialist #ES34704 and Amy Wakefield, Certified Asbestos Hazard Evaluation Specialist #ES543881.

All accessible portions of the CUY-480-0.000 bridge were field investigated for the presence of suspected ACMs. A visual inspection of the top and bottom sides of the structure including the deck, parapets, beams, and abutments was conducted. No utilities were affixed beneath the structure.

The following table summarizes the samples that were collected:

<b>Table 1 – Sample Summary – CUY-480-0.000 Bridge SFN 1814249</b>				
<b>Sample</b>	<b>Homogeneous Area</b>	<b>Category</b>	<b>Location of Sample</b>	<b>Positive for Asbestos?</b>
	“No Samples Taken”			

Bulk samples collected are submitted to IATL International Asbestos Testing Laboratories of Mount Laurel, New Jersey, for analysis of asbestos content by polarized light microscopy (PLM) using the Environmental Protection Agency (EPA) Method 600/R-93/116. Appendix B which is set aside for sampling documentation including Chain of Custody, bulk sampling log, and laboratory analysis report has been left blank due to the fact that no samples were taken in this instance. A bridge diagram and photo log are provided in Appendix C.

#### Conclusion and Recommendations

Visual inspection of the bridge indicates that no asbestos containing material appears to be present on the structure.

If suspect ACMs are revealed during demolition or renovation activities that were not identified during this survey it is recommended that work activities cease until a Certified Asbestos Hazard Evaluation Specialist can evaluate the new material(s). Any removal and subsequent disposal of the asbestos containing material during demolition operations must comply with the Ohio Administrative code, the Occupational Safety and Health Administration (OSHA) regulations and the National Emission Standard for Hazardous Air pollutants (NESHAP). Reference the Ohio Environmental Protection Agency adopted chapters 3745-20-03 & 3745-20-04 of the Ohio Administrative Code. This implements the NESHAP standards for asbestos and its removal.

#### Notification

An OEPA Notification of Demolition and Renovation form must be submitted ten (10) working days prior to work activities. Appendix D contains the OEPA form of which Section 1 - General Information 1, 2, 3, 4, and 5; and Section 2 - Project Address Specific Information A, B, C, and D have been completed.

Once the Contractor has been selected for the project, the remaining sections of the form shall be completed (as applicable) and the notification form submitted with the proper remittance to the following address at least 10 working days prior to starting work:

Ohio EPA, DAPC Asbestos  
P.O. Box 1049  
Columbus, Ohio 43216-1049

The form may also be completed/submitted via on-line at <https://epa.ohio.gov/dapc/atu/asbestos>.

AHES Signature



Charles E. Kessler, AICP, CAHES, CEP  
Asbestos Hazard Evaluation Specialist #ES34704

Attachments



Path: C:\Users\Anna\_Giordano\Desktop\GIS\_CUY-480-0.000\Map1\_Location.mxd  
Date: 1/26/2021

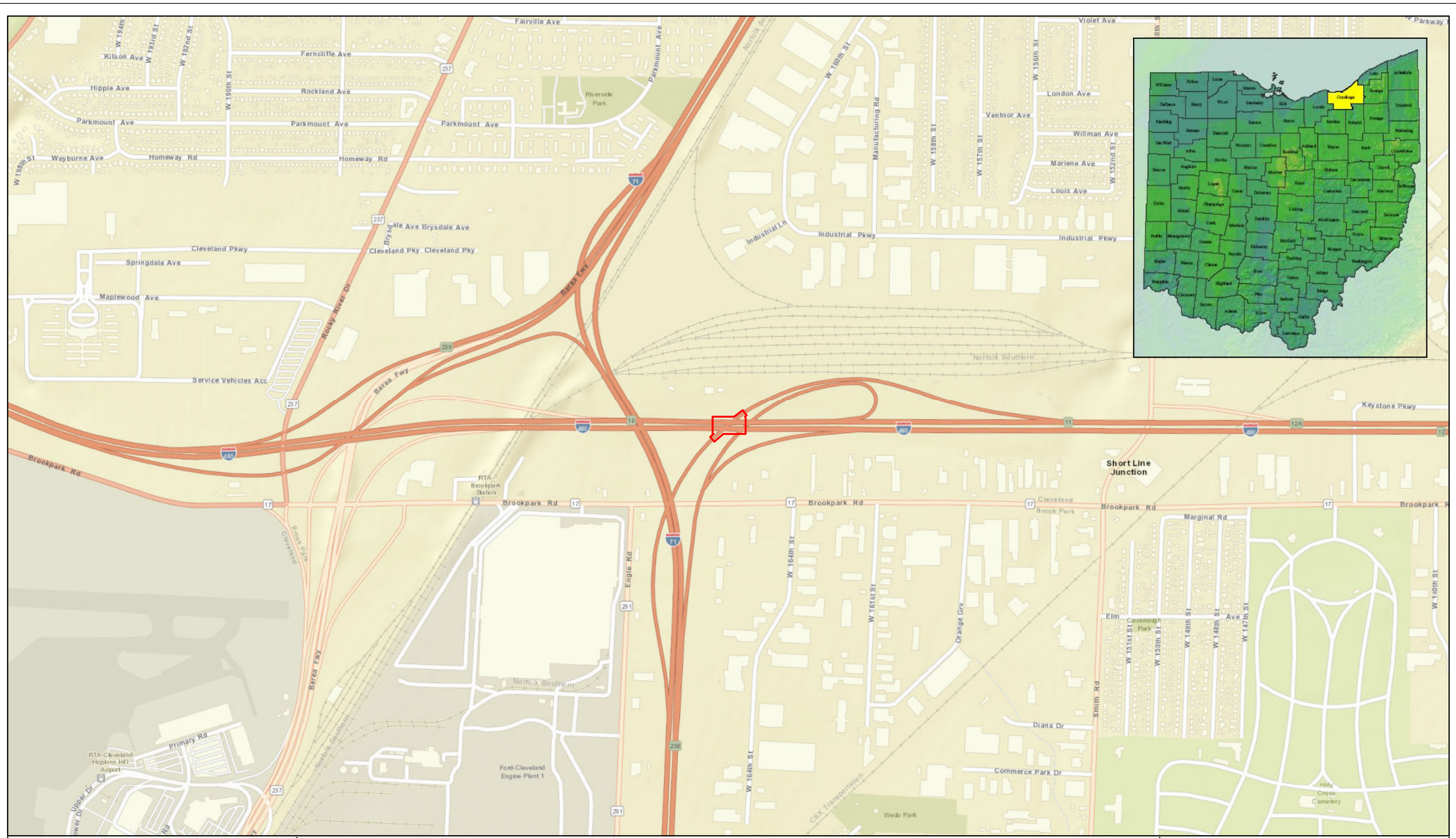
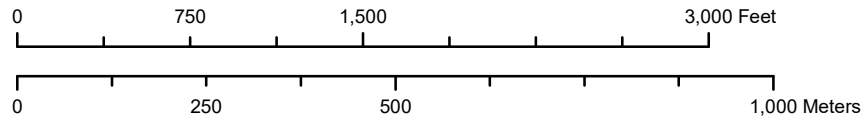


Figure 1. Location of Site on Highway Map of Cuyahoga County, Ohio. CUY-480-0.000.

 Project Area



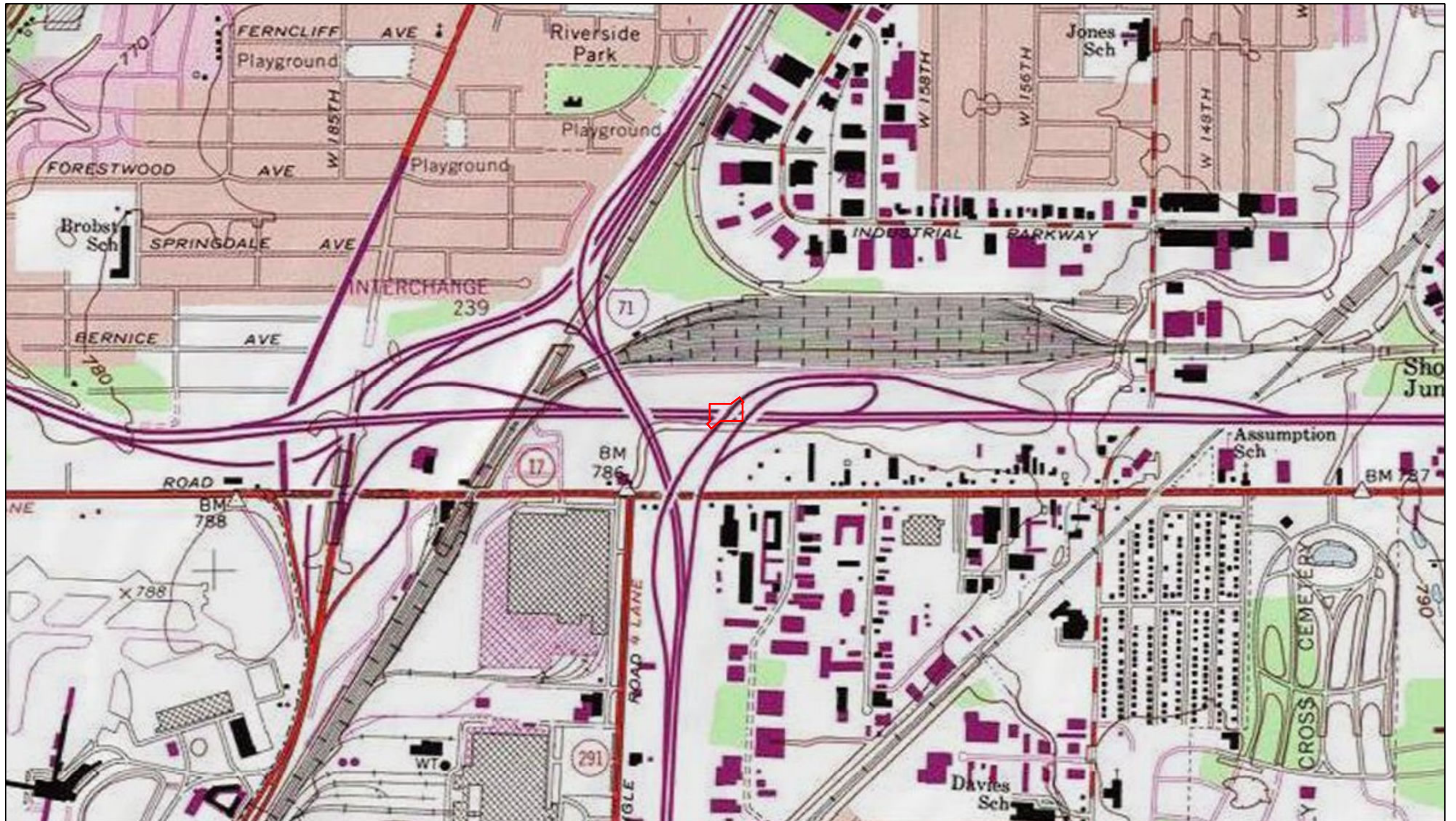
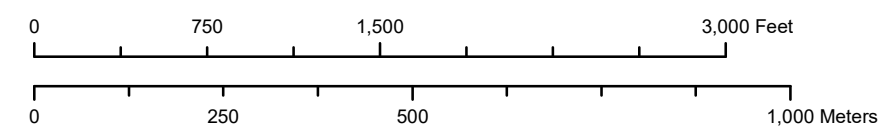


Figure 2. USGS 7.5-minute Topographic Map of Lakewood Quadrangle. CUY-480-0.000.

 Project Area



Date: 1/26/2021 Path: C:\Users\Anna\_Giordano\Desktop\GIS\_CUY-480-0.000\Map2\_Topoc.mxd



# Sample Log

## –Bulk Asbestos –

Client: \_\_\_\_\_ Project: \_\_\_\_\_

Sampling Date/Time: \_\_\_\_\_

Bulk Asbestos Sample Log			
Client Sample #	iATL #	Location/Description	Notes





**CUY-480-0.000**  
480/71 ramp over I-480 mainline

**Legend**  
📌 41.42056, -81.81583



41.42056, -81.81583

Google Earth

© 2020 Google  
© 2020 Europa Technologies

70 ft





**PHOTO 1**  
Looking north at CUY-480-0.000  
bridge. No utilities affixed to the  
structure.



**PHOTO 2**  
Looking at the south end wall.  
Concrete and steel only.



**PHOTO 3**  
Facing north looking at the east  
side of the structure.



**PHOTO 4**  
Underside of structure. South end.



**PHOTO 5**  
Rocker and bearing plate, (all metal)



**PHOTO 6**  
Topside of structure facing northwest.





# Notification of Demolition and Renovation/Abatement

## Section 1: General Information

Division of Air Pollution Control

Work on projects cannot begin until 10 working days after a COMPLETE original notification form, **including payment**, is submitted to Ohio EPA. Instructions and a worksheet for fee calculation are available at [epa.ohio.gov/asbestos](http://epa.ohio.gov/asbestos). This form can be completed, and payment made, at [ebiz.epa.ohio.gov](http://ebiz.epa.ohio.gov). Questions? [asbestos@epa.ohio.gov](mailto:asbestos@epa.ohio.gov) or (614) 466-0061.

Ohio EPA Use Only	Notification #:	Postmarked: / /	Received: / /	<input type="checkbox"/> Hand-Delivered
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### 1) Notification Information (Check all that apply)

<input checked="" type="checkbox"/> Original	<input type="checkbox"/> Revision # (count):	<input type="checkbox"/> Installation	<input type="checkbox"/> Emergency	<input type="checkbox"/> Annual	<input type="checkbox"/> Cancellation	Project County: Cuyahoga
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### 2) Owner, Asbestos Abatement Contractor, Billing and Fire Department Information Revised?

Owner			
Name: Ohio Department of Transportation			Is this a company? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Address: 5500 Transportation Blvd		Contact Person: Mark Carpenter	
City: Garfield Heights	State: OH	Zip: 44125 -	
Email: Mark.Carpenter@dot.state.oh.us	Phone: ( 216 ) 584 - 2089	Fax: ( ) -	
Asbestos Abatement Contractor (if applicable)			
Name:	License #: AC	Expiration Date: / /	
Address:		Contact Person:	
City:	State:	Zip: -	
Email:	Phone: ( ) -	Fax: ( ) -	
Billing Contact			
Is this contact associated with the <input type="checkbox"/> Owner, <input type="checkbox"/> Asbestos Abatement Contractor, or <input type="checkbox"/> Demolition Contractor (if not installation)?			
Address:		Contact Person:	
City:	State:	Zip: -	
Email:	Phone: ( ) -	Fax: ( ) -	
Fire Department (if applicable)			
Name:			
Address:		Contact Person:	
City:	State:	Zip: -	
Email:	Phone: ( ) -	Fax: ( ) -	

### 3) Ohio Asbestos Hazard Evaluation Specialist and Evaluation Procedure Revised?

Evaluation Specialist: Charles Kessler	Certification #: ES 34704	Expiration Date: 10 / 7 / 2021
Procedure, including analytical methods, employed to detect the presence of and to estimate the quantity of regulated asbestos-containing material (RACM) and Category I and Category II non-friable asbestos-containing material: <input checked="" type="checkbox"/> PLM <input type="checkbox"/> Point Count <input type="checkbox"/> TEM <input type="checkbox"/> Other Method (Explain Below):		
Bulk Sampling w/point count of samples that are less than 10% asbestos containing		

### 4) Procedures to be followed should unexpected RACM be discovered (check all that apply) Revised?

<input checked="" type="checkbox"/> Stop work and keep wet	<input type="checkbox"/> Evacuate area	<input type="checkbox"/> Demarcate area	<input type="checkbox"/> Contact licensed abatement contractor
<input type="checkbox"/> Contact district office/local air authority			
<input checked="" type="checkbox"/> Other (Explain): Notify ODOT Project Engineer and Project Superintendent			

### 5) Planned Demolition (check all that apply) Revised?

Describe demolition work to be performed and method(s) to be employed, including demolition techniques to be used:	
<input type="checkbox"/> Implosion	<input type="checkbox"/> Fire Training <input checked="" type="checkbox"/> Wet Methods <input checked="" type="checkbox"/> Manual Demolition <input checked="" type="checkbox"/> Mechanical Demolition <input type="checkbox"/> Other (Explain):
Existing structure components will be removed by industry standard means and methods	

# Notification of Demolition and Renovation/Abatement

## Section 1: General Information

Continued

Mail completed form and payment to:  
Ohio EPA, DAPC – Asbestos  
P.O. Box 1049, Columbus, OH 43216-1049

Description of affected facility components (include attachment if necessary):

(Revised 02/18) Page 1 of 3

**6) Asbestos Description and Engineering Controls (if asbestos is being abated)** Revised?

For the material listed in each project, describe the type(s) of ACM to be abated, engineering controls and work practices to be used to minimize emissions and ensure proper waste handling:

Type of ACM to be abated:	<input type="checkbox"/> Surfacing	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Other		
Engineering Controls:	<input type="checkbox"/> Wet Methods	<input type="checkbox"/> Glove Bag	<input type="checkbox"/> NPE	<input type="checkbox"/> AFD	<input type="checkbox"/> Other:
Work Practices:	<input type="checkbox"/> Intact Removal	<input type="checkbox"/> Manual	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Other:	

**7) Asbestos Waste Transporter (if applicable)** Revised?

Transporter #1 Name:		
Address:		Contact Person:
City:	State:	Zip: -
Email:	Phone: ( ) -	Fax: ( ) -
Transporter #2 Name (if applicable):		
Address:		Contact Person:
City:	State:	Zip: -
Email:	Phone: ( ) -	Fax: ( ) -

**8) Asbestos Waste Disposal Site (if applicable)** Revised?

Name:		
Address:		Contact Person:
City:	State:	Zip: -
Email:	Phone: ( ) -	Fax: ( ) -

**9) Emergency Demolition (complete if you checked "Emergency" above and "Demolition" for any project)** Revised?

A copy of the issued order, including the following information, **must be attached** to this notification.

Government Official Issuing Order:	Title:
Agency:	Authority of Order (Citation of Code):
Date of Order: / /	Demolition Date: / /

**10) Emergency Renovation/Abatement (complete if you checked "Emergency" above and "Renovation/Abatement" for any project)** Revised?

Date of Emergency: / /	Time of Emergency: : <input type="checkbox"/> a.m. <input type="checkbox"/> p.m.
Description of Sudden, Unexpected Event:	
Explanation of how the event caused unsafe conditions or equipment damage:	

**11) Attestation** Revised?

In accordance with Ohio Administrative Code rule 3745-20-03(A)(4)(p), I certify that at least one person trained as required by paragraph (B) of rule 3745-20-04 of the Administrative Code will supervise the stripping and removal described by this notification. I acknowledge that the submission of false or misleading statements is prohibited by law and I certify that facts contained in this notification are true, accurate, and complete.

Signature:	Date: / /
Name: Mark Carpenter	Title: District 12 Environmental Engineer
Organization: Ohio Department of Transportation	



# Notification of Demolition and Renovation/Abatement

## Section 2: Project Address Specific Information

Division of Air Pollution Control

Please complete Section 2 for the address included with this notification. If the project is an "Installation" per OAC 3745-20, complete a separate Section 2 page for each address associated with this notification.

Ohio EPA Use Only Project ID #:

**A. Facility Description** Revised?

Building Name (if applicable): CUY-480-0.000		Site Location (specific): IR-480/IR-71 ramp over I-480 Mainline SFN 1814249	
Address: Over the I-480 Mainline, Coordinates: 41.42056, -81.81583			
City: Cleveland		State: OH	Zip: 44135 -
Building Size (square feet):		No. of Floors:	Age: 41
Present Use: Highway Bridge		Prior Use: Highway Bridgel	

**B. Type of Operation (check all that apply)** Revised?

Demolition     Renovation/Abatement – Type:     Removal     Repair     Encapsulation     Enclosure

**C. Asbestos Present (check one)** Revised?

Yes     No     No, previously abated    Year Abated:

**D. Approximate Amount of Asbestos-Containing Materials (complete table below and Section 1 #6 if asbestos is present)** Revised?

	Material to be Removed				Material NOT to be Removed	
	RACM	Non-friable Asbestos-Containing Material		Non-friable Asbestos-Containing Material		
		Category I	Category II	Category I	Category II	
Pipes (linear feet)						
Surface area on other facility components (ft <sup>2</sup> )						
Volume if length or area cannot be measured (ft <sup>3</sup> )						

**E. Asbestos Abatement Schedule and Abatement Specialist (original notification is required 10 working days prior to the start of work)** Revised?

Setup Date: / /		Abatement Date: / /			Complete Date: / /		
(Shift 1) Time start/end on site	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Abatement Specialist Name:				Certification #: AS		Expiration Date: / /	
(Shift 1) Time start/end on site	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Abatement Specialist Name:				Certification #: AS		Expiration Date: / /	

**F. Demolition Contractor (if applicable)** Revised?

Name:		
Address:		Contact Person:
City:	State:	Zip: -
Email:	Phone: ( ) -	Fax: ( ) -

**G. Demolition Schedule (original notification is required 10 working days prior to the start of work)** Revised?

Start Date: / /	Complete Date: / /
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**H. Project Hold** Revised?

Hold Begin Date: / /	Work Resume Date: / /
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