AMENDMENT #1 TO TSCA RISK-BASED CLEAN-UP OF PCBS (FIELD ADMINISTRATION ONE STOP OFFICES RENOVATION) BERKSHIRE COMMUNITY COLLEGE 1350 WEST STREET PITTSFIELD, MASSACHUSETTS

PREPARED FOR:

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1 Introduction

ATC Group Services LLC (ATC) has prepared this Amendment #1 to the Notification of a risk-based clean-up of polychlorinated biphenyls (PCBs) under the Toxic Substances Control Act (TSCA), on behalf of the Commonwealth of Massachusetts, Executive Office for Administration and Finance, Division of Capital Asset Management and Maintenance, Office of Planning, Design and Construction (DCAMM) and Berkshire Community College (BCC). DCAMM is managing the work on behalf of BCC. BCC is located at 1350 West Street, Pittsfield, Massachusetts.

The Notification, dated March 11, 2016 ("Notification"), was previously submitted for work being conducted primarily at Hawthorne and Melville Halls on the BCC campus. The Notification was approved by EPA in a letter dated June 29, 2016 ("EPA Approval"). The work outlined in that Notification was completed in 2017. Previous work had also been completed in 2011-2012, in coordination with EPA, at seven campus buildings where PCBs were found in building materials.

This Amendment #1 to the Notification focuses on PCB abatement that is planned in conjunction with a renovation project involving the first floor and south exterior area of the Field Administration Center (FAC) building at BCC, along with a limited area of the second floor of the adjacent and connected Koussevitzky Arts Center. In the project areas, PCBs at concentrations =/> 50 parts per million (ppm) were found primarily in caulking used in floor/paver walkway joints on the interior and exterior of the FAC building. Limited quantities of caulking with PCBs slightly above 50 ppm around interior doors will also be disturbed during the project scope of work. These materials, along with some adjacent substrate building materials, will be removed as PCB Bulk Product Waste. Some areas of additional building materials that will not be removed during the project, such as concrete columns/walls/ceilings and CMU walls, will be coated with an encapsulating epoxy.

The planned abatement work for the PCB-containing caulking and adjacent materials generally follows the approaches previously used for similar materials at various campus buildings between 2011 and 2017.

The following is information regarding the entity submitting this report:

Entity:	The Commonwealth of Massachusetts Executive Office for Administration and Finance Division of Capital Asset Management and Maintenance Office of Planning, Design and Construction for Berkshire Community College
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2 Site Description and Background

This section provides a brief Site description and background. Further details on historical PCB abatement over the past 10 years were provided in prior reports.

2.1 BCC Campus Description

The Site is located on the campus of Berkshire Community College, owned by the Commonwealth of Massachusetts. The Site includes seven buildings that are impacted by PCBs: Melville Hall, Hawthorne Hall, Field Administration Building, Koussevitzky Arts Center, Jonathan Edwards Library, Susan B. Anthony Center, and Paterson Field House. The Susan B. Anthony Annex (constructed 1995) and Ralph Hoffman Environmental Center (constructed in 1975 after construction of the original seven site buildings) are not part of the Site due to the fact that they were not identified as having PCB containing caulk based upon construction history, construction methods, and/or building material sampling and analysis. Stanley Power Plant has not been renovated, and therefore was not evaluated for PCBs.

The majority of the Site buildings are located to the north of West Street on the northern portion of the BCC campus. Paterson Field House is located to the south of West Street on the southern portion of the BCC campus. A Site vicinity map showing the location of the BCC campus is provided as Figure 1. A Site plan showing the location of the Site buildings is provided as Figure 2.

The Site buildings affected by PCBs are of varying heights, uses, and sizes as summarized below:

Building Name	Stories	Uses	Square Feet
Melville Hall	1 to 2	Classrooms, Offices, Teaching Labs	39,046
Hawthorne Hall	1 to 2	Classrooms, Offices, Teaching Labs	39,232
Field Administration Center (FAC)	2	Administrative Offices	30,399
Koussevitzky Arts Center	2 to 5	Theater/Auditorium, Classrooms, Art Studios, Storage	49,274
Jonathan Edwards Library	1 to 2	Library, Offices, Storage	19,650
Susan B. Anthony Center (SBA)	1 to 2	Offices, Meeting Rooms, Dining Hall, Day Care Center, Storage	41,262
Paterson Field House	1 to 3	Gymnasium, Meeting Rooms, Locker Rooms, Storage	41,688

The seven PCB-impacted Site buildings share similar basic envelope construction, consisting of cast-in-place concrete structural frames in-filled with concrete masonry unit (CMU) block walls, commercial grade aluminum windows/storefront assemblies, and flat roofs. Construction of the seven Site buildings took place in 1969.

2.2 Documents Related to Prior PCB Abatement Work

The chronology of key TSCA documents related to PCB assessment and abatement, for the entire BCC campus, are provided in the following table.

Table 1: Key TSCA-Related Submittals for BCC

Date	Submission / Response
April 4, 2011	Submission of TSCA Clean-Up Plan Request (*Request*) (ATC) to the EPA, covering exterior façade repairs, and window/storefront replacement in certain buildings.

Date	Submission / Response
June 19, 2011	EPA provides comments on the *Request*.
January 13, 2012	TSCA Plan (*Revised Request*) (ATC) submitted to the EPA.
March 27, 2012	EPA provides comments on the *Revised Request*.
May 11, 2012	ATC provides answers to EPA's comments on the *Revised Request* and Supplemental Package summarizing PCB abatement completed in 2011.
November 5, 2012	EPA provides additional comments and requests project status update.
February 13, 2013	E-mail reply from ATC responding to questions raised in the EPA's November 5, 2012 email.
January 24, 2014	Submission of *Closure Report for TSCA Interim Risk-Based Cleanup of PCBs* (*Closure Report*) (ATC) to the EPA, covering Phases 1 and 2 of the project (exterior façade repairs, and window/storefront replacement in certain buildings).
April 25, 2014	*BCC Annual PCB Wipe Sampling and Inspection Program Results (2013*) (ATC) prepared, discussing the 1st annual exterior façade inspection program.
April 20, 2015	ATC provides a letter to the EPA, outlining the results of additional suspect PCB-containing material sampling (caulk and glazing compound) in preparation for renovation of Hawthorne and Melville Halls.
June 11, 2015	The project team (DCAMM, BCC, NBBJ, and ATC) meet with EPA to discuss the project and the path forward for the next phases of work on campus (renovation of Hawthorne and Melville Halls).
August 18, 2015	ATC provides letter to the EPA discussing the results of assessment of interior building materials at Hawthorne Hall and proposed approach to managing those materials.
March 11, 2016	Submission of *Notification of TSCA Risk-Based Cleanup of PCBs* (*Phase 3*) (ATC) to the EPA, covering Phase 3 of the project (interior and exterior abatement at Hawthorne and Melville Halls, including window/storefront replacement).
June 6, 2016	*Annual PCB Wipe Sampling and Inspection* (ATC) prepared, discussing the annual exterior façade inspection program.
June 29, 2016	EPA issues *PCB Alternative Decontamination and Risk-Based Disposal Approval under40 CFR § 761.61(c) and§ 761.79(h)*, for the Hawthorne/Melville project.
July 13, 2016	ATC letter to the EPA outlining proposed campus-wide indoor air sampling for PCBs.
June 15, 2017	*Annual PCB Wipe Sampling and Inspection - 2017* (ATC) prepared, discussing the annual exterior façade inspection program.
July 18, 2017	ATC letter to the EPA outlining the results of the campus-wide indoor air sampling for PCBs that was conducted over the prior year.

2.3 FAC Building Description

The 2-story Field Administration Center is used as for administrative offices. The 2nd floor of the building is connected on the east end with the Susan B. Anthony building and on the west end with Koussevitzky Arts Center.

The FAC building is constructed of a cast-in-place concrete structural frame in-filled with concrete masonry unit (CMU) block walls, exterior commercial grade aluminum windows/storefront assemblies that were installed in 2010/2011, and a flat roof.

The 2nd floor of the south side of the building overhangs an exterior brick paver walkway, and is supported by concrete columns on the outside edge. This walkway area will be enclosed as part of the project to create additional interior space.

Demolition drawings showing the current layout of the first and second floors of the FAC building, the northwest corner of the first floor of SBA, and the northeast corner of the Koussevitzky building, are provided in Appendix D. These drawings also show the extent of demolition of building materials in the project area. Photographs of the project areas that contain PCB-contaminated building materials are included in a log in Appendix A.

2.4 Planned FAC Renovation Project

The planned "One Stop Offices" renovation project involves a gut renovation of most areas of the first floor and south exterior area of the FAC building. Stairwells and the northwestern wing of the building are not included in the project scope. The exterior envelope of the building will not be disturbed, except for the south first floor façade, where storefront windows and designated entrance/lobby doorways are being removed and the current adjacent exterior walkway is being enclosed to create additional interior space. No work is being conducted on the second floor of the FAC building except for minor utility penetrations to service the renovated first floor spaces. In addition, several limited areas of the adjacent SBA and Koussevitzky Arts Center buildings are included in the project, as follows:

- A limited area of the second floor of the adjacent and connected Koussevitzky building, which will be converted into a handicap bathroom, including one doorway and interior walls of one room.
- Pavers are being removed in the exterior area of the northeast corner of the Koussevitzky building, up to the first floor entrance at this corner of the building.
- The vestibule entrance doors (inner and outer) and vestibule pavers are being removed and replaced on the northwest corner of the SBA building, closest to the FAC project area.

Areas involved in the project renovation that will be demolished/disturbed are shown on the demolition drawings in Appendix D.

In the project areas, PCBs at concentrations significantly above 50 ppm were found in caulking used in floor/paver walkway joints on the interior and exterior of the FAC building. Limited quantities of caulking with PCBs slightly above 50 ppm around certain interior storefront doorway assemblies and single doors will also be disturbed during the project scope of work. Areas of the FAC, Koussevitzky, and SBA buildings outside of the project scope of work are not covered in this Amendment.

3 Nature & Extent of PCBs in Building Materials

This section summarizes assessment of building materials that will be disturbed by the planned FAC renovation project that contain PCBs, and discusses their extent, as required by 40 CFR 761.61(a)(3)(i)(A) and 40 CFR 761.61(a)(3)(i)(C).

3.1 Recent Building Material Sampling

ATC collected various samples of suspect PCB-containing materials, and adjacent substrates, between October 2019 and March 2020.

3.1.1 Sampling of Suspect Building Caulking

On October 25 and November 26, 2019 and January 16, 2020, ATC collected representative samples of suspect caulking from areas that will be disturbed during the renovation on the interior and exterior of the FAC building. Caulking was present at various interior and exterior locations, including in paver joints, interior door frame perimeters, joint between CMU walls and concrete ceilings, joints between CMU walls and plaster ceilings, and exterior storefront window and door assembly frame perimeters. Descriptions of the specific locations and use of the sampled caulking materials are provided in Table 2, and typical photographs of these materials are provided in Appendix A. Most or all of the caulking materials are believed to be original to the joints, except for some storefront door assembly and storefront window frame caulking, which was installed when these door assemblies and windows were replaced in 2010-2011.

The samples were collected using hand tools, which were properly decontaminated between samples using hexane. The samples were placed in laboratory-supplied sample jars and submitted to Con-Test Analytical Laboratories of East Longmeadow, Massachusetts (Con-Test) on a chain-of-custody for extraction in accordance with EPA Method 3540C (soxhlet) followed by analysis in accordance with EPA Method 8082 (Aroclors).

The laboratory analytical reports are provided in Appendix B, and data is tabulated in Table 2. There were detections of Aroclors 1254 and/or 1260 in all samples of old caulk, with concentrations up to 180,000 ppm and 29,000 ppm, respectively. Aroclor 1221 was detected in one sample and Aroclor 1242 in two samples of old caulk, both at low levels (<5 ppm). Other Aroclors were not detected.

Caulking at wall/ceiling joints was present at a maximum concentration of 18 ppm, and is considered an Excluded PCB Product. Caulking at interior storefront door assembly frames and one single door frame contained PCBs at a maximum concentration of 67 ppm (two locations), and is considered a PCB Bulk Product. Caulking at interior and exterior paver joints was present at generally high levels (up to 209,000 ppm) and is considered a PCB Bulk Product.

As outlined in Table 2, Aroclor 1254 was detected in two of eight samples of caulking around the south-side storefront windows (newly installed with the storefront windows in 2010-2011) at concentrations of 1.0 and 2.4 ppm. This material is considered a PCB Remediation Waste <50 ppm, and was presumably contaminated by leaching from the adjacent impacted concrete, which was historically contaminated by leaching from original storefront window caulking that was removed in 2010-2011.

Laboratory quality assurance/quality control (QA/QC) issues included lack of surrogate recovery due to necessary dilutions. This QA/QC issue is not considered to have a significant effect on ATC's interpretation of the data.

3.1.2 Sampling of Adjacent (Substrate) Building Materials

On January 16-17, 2020, ATC collected representative samples of substrate building materials that are adjacent to the caulking materials identified as PCB Bulk Product Waste. These adjacent

materials include primarily pavers and concrete foundations, walls, columns, and ceilings, but also CMU block walls and sub-base material under the pavers. ATC did not sample non-porous storefront window and door frames, as these materials are assumed to be contaminated with PCBs >1 ppm or >1 ug/100 cm^2, and will be decontaminated, or removed and disposed off-Site along with adjacent PCB Bulk Product Waste caulking.

On March 18, 2020, ATC collected additional samples of substrate building materials (concrete and CMU) to further refine our understanding of the PCBs present in these materials at distances of 5 feet and more from PCB-containing caulking materials. Samples distances ranged from 5 to 7 feet from the nearest caulking material, far enough that it was unlikely that the sampled materials would be contaminated by PCBs migrating from the caulking materials. At each of 12 locations, 4 CMU locations and 8 concrete locations, paint was scraped from the surface of the masonry material and collected for analysis of PCBs. Following removal of paint, the CMU and/or concrete was collected using standard methods described below. In addition, ATC collected three samples of the (unpainted) concrete waffle ceiling at a distance of at least one foot from caulking around door frames.

The masonry samples were collected using standard EPA methods, including drilling a hole in the building material to a maximum depth of 1/2-inch and collecting the resulting dust/debris. All sampling tools, including the hammer drill bit and hand tools, were decontaminated between sample locations using hexane. The samples were placed in laboratory-supplied sample jars and submitted to Con-Test Analytical Laboratories of East Longmeadow, Massachusetts (Con-Test) on a chain-of-custody for extraction in accordance with EPA Method 3540C (soxhlet) followed by analysis in accordance with EPA Method 8082 (Aroclors).

The laboratory analytical reports are provided in Appendix C, and data is tabulated in Table 3. The results indicated the following:

- Exterior Brick Pavers - Aroclors 1254 and 1260 were detected in one of two samples of brick pavers collected at a distance of 8 inches from the exterior paver joint caulking, with a total PCB concentration of 0.27 ppm. No PCBs were detected in the other sample. As noted in the next section, these data are consistent with results from six other samples of exterior paver material, and six samples of mortar between pavers, collected in 2012. On the current exterior of the building, pavers and mortar between pavers that are less than 8 inches away from exterior joint caulk is assumed to contain PCBs and considered a PCB Remediation Waste >50 ppm.
- Exterior Granular Sub-base - Two samples of an approximately one-inch thick layer of granular sub-base material underneath the exterior pavers (immediately beneath the paver joint caulk) was analyzed, with total PCB results (Aroclors 1254 and/or 1260) of 1.6 and 2.6 ppm. This sub-base material that underlies the pavers within 8 inches of the paver joints is considered a PCB Remediation Waste <50 ppm. ATC does not consider it possible that PCBs have migrated in sub-base material underneath pavers more than 8 inches away from paver joints.
- Interior Brick Pavers - Aroclor 1254 was detected in three of four samples of brick pavers collected at a distance of six or eight inches from the interior paver joint caulking, with total PCB concentrations of 0.32, 3,9, and 27 ppm. At both of the locations where PCBs exceeded 1 ppm, additional samples at greater distances of 12, 24, and 36 inches from the paver joint caulk were also analyzed. Results indicated Aroclors 1254 and/or 1260, with total PCBs in all the samples greater than 1 ppm and a maximum concentration of 29 ppm. Concentrations of PCBs in interior pavers are likely greater than in exterior pavers due to the higher concentrations of PCBs detected in interior paver joint caulk, as well as floor maintenance procedures over the past decades, such as cleaning and polishing, that may have spread PCBs across the floor surface. All interior pavers and

mortar between pavers, along with underlying sub-base material, is considered a PCB Remediation Waste >50 ppm.

- Exterior Concrete Walls/Columns Near Paver Joints – No PCBs were detected in three samples of concrete walls/columns collected at a distance of 12 inches above exterior paver joints. On the current exterior of the building, concrete in walls and columns less than 12 inches above paver joints, and downward to the concrete slab underlying brick pavers, is assumed to contain PCBs and considered a PCB Remediation Waste >50 ppm.
- Interior Paint – Twelve interior paint samples were collected from both concrete and CMU surfaces in the project area, at distances of greater than 5 feet from caulk materials. These surfaces were likely painted when the building was originally constructed, and periodically repainted. Aroclors 1248 (one sample), 1254 (all samples), and/or 1260 (four samples) were detected in the samples, with total PCB concentrations between 0.71 and 245 ppm. Total PCBs exceeded 1 ppm in all but one sample and 50 ppm in four samples. Concentrations in most paint samples ranged from 7.5 to 22.5, which is similar to concentrations in paint sampled at Hawthorne Hall for the previous renovation of that building. ATC considers that all paint throughout FAC is an Excluded PCB Product, which is the same classifications as the paint at Hawthorne Hall, which is reasonable since both buildings were constructed at approximately the same time. However, the four samples of paint that contained significantly higher concentrations of paint (86 to 245 ppm) were all located in Vestibule 100 A or Entry 100B, two adjacent rooms at the west end of the FAC first floor. ATC concludes that the paint in these two rooms, which are separated from the rest of the project area by a doorway, was contaminated by some unknown source of PCBs >50 ppm (such as a leaking light ballast) and is classified as a PCB Remediation Waste.
- Interior Concrete and CMU Walls/Columns/Foundation Walls – For structural concrete and CMU in-fill walls/columns/foundation walls on the interior of FAC, samples were collected in various locations at varying distances from caulk joint during initial sampling efforts. In some locations near storefront door assembly and single door frame caulking, samples were collected at the edge of the caulked joint, since door frame caulking has much lower concentrations of PCBs (maximum 67 ppm) than floor joint caulking. The later sampling event focused on samples in randomly-distributed locations at distances of at least 5 feet from caulking materials. Aroclors 1248, 1254, and/or 1260 were detected in all of these samples, with total PCB concentrations between 0.11 and 14.3 ppm. In many samples of both concrete and CMU, total PCB concentrations exceeded 1 ppm at distances of 24 inches, 36 inches, and even 5 feet or more from the nearest caulked joint where paint had been scraped away from the underlying masonry before sampling. Since it is unlikely that PCBs on interior surfaces would migrate upward a significant distance from floor joint caulking, or sideways a significant distance from storefront/door frame caulking with a maximum PCB concentration of 67 ppm, ATC concludes that the concrete and CMU greater than 12 inches from caulk joints has been impacted by an Excluded PCB Product, consisting of paint and/or form-release oil used during original building construction as was the case at Hawthorne Hall. Interior concrete and CMU in walls, columns, and foundation walls within a distance of 12 inches of floor joint or storefront/door frame caulking is considered a PCB Remediation Waste <50 ppm.
- Interior Concrete Waffle Ceilings – Samples of unpainted concrete waffle ceilings were collected in three locations on the first floor of FAC. The nearest caulking to the ceiling is around storefront/door frames, which had relatively low PCB concentrations (67 ppm). Aroclors 1248, 1254, and/or 1260 were detected in all of these samples, with total PCB concentrations between 0.62 and 3.43 ppm. All concrete ceilings are believed to be contaminated at low levels by concrete form-release oil used during original building

construction as was the case at Hawthorne and Melville Halls. However, ceilings within a distance of 12 inches of storefront/door frame caulk beads is considered a PCB Remediation Waste <50 ppm.

- Some other building materials adjacent to or near PCB Bulk Product caulking are also assumed to contain PCBs at concentrations >1 ppm, including:
    - Carpeting, underlayment, and carpet mastic in Rooms 125 and 126; which overlies brick pavers;
    - Drywall and other porous wall materials (e.g., wood framing) within 12 inches of caulking materials; and
    - Concrete steps and wood handicapped ramps in the first floor lobbies at either end of the FAC project area.

The most common laboratory quality assurance/quality control (QA/QC) issue was lack of surrogate recovery due to necessary dilutions. This QA/QC issue is not considered to have a significant effect on ATC's interpretation of the data. For two samples (interior pavers) holding time was exceeded and matrix spike or spike duplicate recovery was high, indicating a high bias. However, the concentrations significantly exceeded the 1 ppm criteria, so these issues are not considered to affect interpretation of data. For one CMU sample, the relative percent difference (RPD) between primary and confirmatory analysis exceeded criteria, and the lower value was reported due to obvious chromatographic interference on the other column.

3.1.3 Previous Sampling of Brick Pavers and Underlying Concrete Slab

ATC previously completed sampling of both paver bricks and mortar between the paver bricks in 2012 at various exterior walkway locations around FAC and the adjacent Susan B. Anthony Center (SBA). This sampling effort and results were discussed in the *Closure Report for TSCA Interim Risk-Based Cleanup of PCBs* (*Closure Report*) (Cardno ATC, 2014), with the laboratory report presented in the *Revised Request* and Supplemental Package (ATC, 2012). Since the results are directly applicable to the current project, the 2012 sampling is summarized here.

Six brick samples and six mortar samples were collected at a distance of 8 inches from the nearest paver joint caulking, using standard EPA methods. These methods included drilling a hole in the material to a maximum depth of 1/2-inch and collecting the resulting dust. The hammer drill bit and associated tools were decontaminated between sample locations. The samples were submitted to TestAmerica Laboratory located in Westfield, Massachusetts (TestAmerica) under chain-of-custody protocol for analysis using soxhlet extraction and analysis for PCB Aroclors using EPA Method 8082.

The results are presented in Table 2. PCBs were detected in only one of the samples analyzed, with appropriately low detection limits (below 1 ppm). The total PCB concentration detected in one mortar sample was 0.13 ppm, below the most stringent TSCA clean-up level of 1 ppm. These results are very similar to the exterior paver samples collected in 2020 from the south adjacent exterior walkway pavers at FAC, and support the planned remedial approach for exterior pavers.

The laboratory did not report any quality control problems during analysis.

ATC also previously completed sampling of the concrete underslab beneath the granular sub-base material that underlies the paver bricks in 2011 at various exterior walkway locations around FAC and SBA. This sampling effort and results were discussed in the *Revised Request* and Supplemental Package (ATC, May 11, 2012). Since the results are directly applicable to the current project, the 2011 sampling is summarized here.

Six concrete slab samples were collected of the top of the concrete slab around both FAC and SBA (12 samples total), at locations under caulked paver joints, using standard EPA methods.

These methods included drilling a hole in the concrete surface to a maximum depth of 1/2-inch and collecting the resulting dust. The hammer drill bit and associated tools were decontaminated between sample locations. The samples were submitted to TestAmerica under chain-of-custody protocol for analysis using soxhlet extraction and analysis for PCB Aroclors using EPA Method 8082.

The results are presented in Table 2. PCBs were not detected in any of the samples analyzed, with appropriately low detection limits (below 1 ppm). Based on these non-detectable results, and the low results of the samples of granular sub-base material collected from beneath caulked paver joints and above the concrete underslab, ATC did not feel it necessary to collect any additional concrete underslab samples.

There were several minor and common laboratory quality control exceedances for the samples, which are not believed to adversely affect usability of the data.

3.2 Summary of PCB-Impacted Materials to Be Managed

The following tables summarize the types of materials, location and extent, and estimated quantities of PCB Bulk Product Waste and PCB Remediation Waste that will be managed as part of the current FAC building renovation project. The noted PCB Remediation Wastes will be either left in place, decontaminated, or disposed off-Site, as discussed in Section 4. Drawings showing the locations of these materials are attached as Figures 3a, 3b, and 4. Table 4c lists Excluded PCB Products that were identified in the building.

Table 4a: List of PCB Bulk Products

Material	Location and Extent	Estimated Quantity
Door Frame Caulk	Caulking around the perimeter of original interior door frames and storefront door assemblies of project renovation areas in FAC (5 in vestibule/lobby areas), SBA (1 in vestibule), and Koussevitzky (1 in vestibule and 1 on 2nd floor).	20 LF/Door x 8 Doors = 160 LF
Paver Joint Caulk - Interior	Interior joint caulking between and on the perimeter of brick pavers in the lobbies and entrance vestibules of FAC, and one entrance vestibule of SBA. Caulked joints shown on Figure 3a.	500 LF
Paver Joint Caulk - Exterior	Exterior joint caulking between and on the perimeter of brick pavers on the south side of FAC in the overhung walkway and in the breezeway between FAC and Koussevitzky. Caulked joints shown on Figure 3a.	400 LF

LF = Linear Feet

Table 4b: List of PCB Remediation Wastes – FAC / Koussevitzky		
Material	**Location and Extent**	**Estimated Quantity**
Interior Concrete Building Foundation/Wall/ Column/Stairs	Contain PCBs > 1 ppm. Poured concrete foundation/walls/columns/stairs adjacent to caulked paver joints, downward an estimated 6 inches to base slab underlying pavers and upward 12 inches on wall/column/stairs above joint caulk.	Estimated 120 LF x 1.5 feet wide = 180 SF
Interior Concrete Building Walls/ Columns	Contain PCBs > 1 ppm. Poured concrete walls/columns within 1 foot of formerly removed exterior windows/storefronts throughout first floor project area.	Estimated 150 LF x 1 feet wide = 150 SF
Concrete Building Ceiling	Interior; assumed to contain PCBs > 1 ppm. Pre-cast concrete waffle ceiling within 1 foot of caulked interior door, window, and storefront frames.	Estimated 350 LF x 1 feet wide = 350 SF
CMU Wall	Interior; contains PCBs > 1 ppm. CMU interior walls within 1 foot of caulked paver joints.	Estimated 20 LF x 1 feet wide = 20 SF
	Interior; contains PCBs > 1 ppm. CMU interior walls within 1 foot of door frame caulking.	Estimated 20 LF x 1 feet wide = 20 SF
Exterior Concrete Building Foundation/Wall/Column	Contains PCBs > 1 ppm. Poured concrete foundation/walls/columns adjacent to caulked paver joint, downward to base slab underlying pavers an estimated 6 inches and upward to nearest storefront frame or 1 foot on wall above joint caulk.	Estimated 150 LF x 1.5 feet wide = 225 SF
Drywall / Wood	Interior; assumed to contain PCBs > 1 ppm within 3 feet of floor joints and window/door/storefront frames. Also includes ramps in Lobby 100E and Hallway outside Rooms 125/126.	Estimated 800 SF
Carpet Materials	Interior; assumed to contain PCBs > 1 ppm. In Office 125 and Office 126, overlying pavers and near caulked paver joint(s).	Estimated 380 SF
Caulking around 2010/2011 Storefront Window & Door Assemblies	New caulking installed around FAC south façade 1st floor storefront windows (4) and outer vestibule storefront door assemblies at FAC (2) and SBA (1), installed in 2010/2011. One of 8 samples contaminated by PCBs >1 ppm (2.4 ppm); all considered >1 ppm.	300 LF
Steel Single Door Frames	Koussevitzky second floor. Assumed to be contaminated by PCBs >10 ug/100 cm^2.	1 door frame

Table 4b: List of PCB Remediation Wastes – FAC / Koussevitzky		
Material	**Location and Extent**	**Estimated Quantity**
Metal and Glass Storefront Door Assembly Materials	Vestibule/lobby entrance storefront door assemblies at FAC (7), SBA (2), and Koussevitzky (1). See Figure 3b. Assumed to be contaminated by PCBs >10 ug/100 cm^2.	10 Storefront Door Assemblies
Caulking around 2010/2011 Pavers	New caulking installed around perimeter of new pavers between FAC and SBA in 2010/2011. Assumed to be contaminated by PCBs >1 ppm.	100 LF
Paint on CMU/Concrete Walls & Columns	Interior Paint coating CMU walls and concrete walls/columns in the west end of FAC, including Vestibule 100A and Entry 100B. Contains PCBs > 1 ppm.	600 SF
Brick Pavers/mortar & Underlying Granular Sub-base	Interior; contain PCBs > 1 ppm horizontally throughout area with pavers and downward to concrete base slab beneath pavers and granular sub-base material.	2,000 SF
	Exterior; contain PCBs > 1 ppm horizontally to a distance of 8 inches from caulked paver joints and downward to concrete base slab beneath pavers and granular sub-base material.	(350 LF x 0.66 feet wide) = 230 SF

LF = Linear Feet
SF = Square Feet

Table 4c: List of Excluded PCB Products* – FAC / Koussevitzky		
Material	**Location and Extent**	**Estimated Quantity**
Wall/Ceiling Joint Caulk	Caulking materials in joints between walls and ceilings. Walls are typically composed of CMU block, while ceilings are concrete waffle ceilings or plaster.	NA
Paint on CMU/Concrete Walls & Columns	Paint coating CMU walls and concrete walls/columns throughout interior of project area.	NA

*Table only includes Excluded PCB Products that remain at the Site. Some CMU and concrete wall surfaces were likely contaminated by an assumed Excluded PCB Product (form releasing oil) that is no longer present or were impacted by paint that is an Excluded PCB Product.

Note that the all the caulking materials to be disturbed, as well as various substrates, are also considered to be asbestos-containing materials or are contaminated by asbestos.

4 Planned Additional Risk-Based Clean-Up Activities

The PCB abatement activities are planned to start later in 2020.

The PCB abatement work activities are intended to manage PCB-contaminated building materials being removed during limited renovations of selected areas of the interior and exterior of the FAC building and adjacent Koussevitzky and SBA buildings, and control exposure to remaining PCBs in concrete/CMU masonry materials in the interior and exterior renovated areas. Given the similarity in construction and PCB-contaminated materials, many aspects of the abatement work will match the work conducted at Hawthorne Hall and Melville Hall in 2015-2017 under the original EPA Approval.

In summary, PCB clean-up work planned and discussed in this Amendment #1 to the Notification includes:

1. Removal of paver joint caulking and specified quantities of adjacent brick pavers/mortar, along with underlying granular sub-base material, in interior and exterior project areas, as PCB Bulk Product Waste;
2. Removal of concrete steps, and the concrete foundation sills beneath storefront windows and doors, adjacent to above-noted paver joint caulking, as PCB Bulk Product Waste;
3. Removal of the CMU wall between Vestibule 100G and Lobby 100E, adjacent to above-noted paver joint caulking, as PCB Bulk Product Waste;
4. Removal of certain vestibule entrance doorway storefronts and adjacent frame caulking on the south side of FAC and northwest corner of SBA, as PCB Bulk Product Waste;
5. Removal of newer caulking around perimeter of storefront windows (installed in 2011-2012) on the south side of FAC and from joints in an area of newer pavers between FAC and SBA, with disposal as PCB Remediation Waste;
6. Decontamination with a solvent of non-porous metal and glass storefront windows and doors in FAC, the northeast corner of Koussevitzky, and the northwest corner of SBA;
7. Removal of interior porous wall materials (primarily drywall) and ramp materials (primarily wood) near the above-noted paver joint caulking, as PCB Bulk Product Waste. Also includes removal of porous wall materials (primarily drywall) within 3 feet of all storefront windows on the south and north sides of FAC to remain or be removed, for disposal as PCB Bulk Product Waste;
8. Removal of carpeting and any underlying padding/mastic in Office 125 and Office 126, which are near the above-noted paver joint caulking, as PCB Bulk Product Waste;
9. Removal of door frame caulk and adjacent door frame, in Koussevitzky 2nd floor, as PCB Bulk Product Waste;
10. Application of two coats of an encapsulant coating to the concrete/CMU foundation, walls, and ceilings adjacent to the removed PCB Bulk Product paver joint, door frame, and storefront frame caulking, to varying distances;
11. Installation of a moisture mitigation barrier and carpet over the remaining pavers in Entry 100B. This flooring material will serve to cover and encapsulate the remaining pavers, which contain PCBs;
12. Confirmatory wipe sampling of encapsulated masonry (concrete/CMU) materials and decontaminated non-porous metal and glass storefront windows/doors.

Most of the PCB-impacted building materials also contain or are contaminated by asbestos. Therefore, the work that includes asbestos-containing materials will be performed in accordance with the procedures outlined in this document as well as regulations of the federal Occupational Safety and Health Administration (OSHA 29 CFR 1926.1101), Massachusetts Department of Labor and Industry (MADLS) 453 CMR 6.00, and the Massachusetts Department of Environmental Protection (MassDEP) 310 CMR 7.15 Asbestos Regulations.

The following subsections describe planned PCB abatement activities in more detail.

4.1 Assignment of Work

The contractor(s) who will be performing the PCB abatement activities have not yet been selected. BCC will communicate to EPA the name(s) of the contractor(s) who will be performing the work.

ATC has been retained as the environmental consultant. ATC will provide environmental oversight and review of the abatement activities prior to, during, and after their performance. ATC will be on-site to

conduct full project monitoring during abatement of asbestos-containing and PCB-containing materials being disturbed during the project. This monitoring includes asbestos air monitoring, project field inspections to ensure full removal of ACM/PCB building materials, and final air clearance sampling for asbestos. ATC will also perform confirmatory wipe testing of the remaining concrete/CMU surfaces after application of coatings and of non-porous surfaces after decontamination.

4.2 Planned Abatement Procedures

Each of the primary components of the risk-based clean-up plan is detailed in the following subsections. The components will be performed generally in the order in which they are listed. An asbestos/PCB abatement specification section, prepared by ATC for the project, is attached as Appendix D.

4.2.1 Communication Plan

BCC communicates regularly with faculty and staff about capital improvement projects. Shami Qazi, BCC Director of Facilities, is the point of contact for faculty and staff.

4.2.2 General Procedures

The work area will be demarcated with caution tape and signage at a distance to keep unauthorized workers and visitors out of the work area. Work will be conducted within a negative-pressure containment in accordance with MADLS and MADEP Asbestos Regulations.

All personnel engaged in abatement will be Massachusetts licensed asbestos workers and/or supervisors and will be 40-hour HAZWOPER trained. Workers will wear, at a minimum, ½-face respirators with P100 particulate filters, water-resistant Tyvek-type suits with boot covers, rubber gloves and eye protection.

On-going ambient air monitoring for airborne asbestos fibers outside the containment will be performed. In addition, post-abatement final air clearance testing for asbestos inside containment will be performed upon completion of all abatement activities and prior to tear-down of the containment. All air testing for asbestos will be performed in accordance with Massachusetts Regulations and all samples will be analyzed by Phase Contrast Microscopy (PCM). These results will be used to provide supporting evidence that the containment is adequately containing PCB-containing dust during the work and is clear prior to breakdown of the containment after the work is complete.

ATC will also conduct dust monitoring of ambient air outside the containment for PM_{10} dust using a field instrument capable of reading PM_{10} continuously on-site. Prior to the beginning of project work, ambient background dust readings will be collected from the surrounding area. Dust readings will be collected periodically during the work day. Any readings greater than two times the background level, or 150 ug/m^3 (whichever is lower) will prompt a work stoppage to determine the reason for the elevated dust levels. The source of the dust, if determined to be associated with the project, will be corrected before work resumes.

At the end of each work shift, all work materials will be stored and the work zone secured. All visible dust and debris will be removed with HEPA vacuums and by hand prior to removal of containment materials.

Tools and equipment used in the PCB abatement effort will be managed as PCB Remediation Waste as discussed in Section 4.4, or decontaminated by double wiping with diesel- or solvent-soaked rags. If rags or other cleaning materials are used for decontamination, they will be disposed as discussed in Section 4.4.

4.2.3 Removal of Paver Joint Caulking, Brick Pavers, and Underlying Sub-Base Material

The location where PCB-containing caulk exists in expansion joints in the brick paver areas are shown on Figure 3a. The caulking, brick pavers, mortar between bricks, and underlying granular sub-base material under the pavers will be removed and replaced with a new concrete floor slab.

The caulking on the exterior contained generally lower levels of PCBs than on the interior, and brick pavers contained PCBs >1 ppm to a greater distance on the interior. Mortar between paver bricks is presumed to be contaminated at the same levels as adjacent pavers. Underlying granular sub-base material has been confirmed to be contaminated >1 ppm directly under paver joints, and is presumed to be contaminated under the pavers to the same distance as the pavers themselves, a conservative assumption. Building material sampling was discussed in Section 3.1.

On the exterior, the joint caulking and adjacent materials noted above will be removed as PCB-contaminated to a minimum distance of eight inches from the joint, where PCB concentrations were <1 ppm. On the interior, pavers to a distance of at least three feet from joint caulking was determined to contain PCBs >1 ppm, and therefore all interior pavers and underlying materials within the project area will be removed as PCB-contaminated. This does not include pavers in Entry 100B, which is outside of the project area, but in this room removal of paver joint caulk and covering of the pavers (see Section 4.2.13) will be conducted. The removed pavers and associated materials will be managed as PCB Bulk Product Waste in accordance with the EPA's 2012 PCB Bulk Product Waste Reinterpretation Memo.

Hand or power tools will be used to remove the paver joint caulking, brick pavers, adjacent mortar, and underlying granular sub-base material inside a negative-pressure containment. The materials will be handled and managed as discussed in Section 4.4.

The concrete under-slab beneath the granular sub-base material will not be removed since this is structural to the underlying basement, and does not contain detectable concentrations of PCBs, as discussed in Section 3.1.3.

4.2.4 Removal of Concrete Steps & Concrete Foundation Sill

Most masonry building components, such as concrete walls and columns, and CMU walls, will remain, as discussed later. However, limited areas of concrete are being removed as part of the project. Concrete steps in lobbies on either end of the FAC building, and the concrete foundation sills beneath the FAC south side storefront windows and doors (and one SBA vestibule storefront door) are adjacent to paver joint caulking and therefore contaminated with PCBs >1 ppm. This concrete material will be removed and disposed as PCB Bulk Product Waste in accordance with the EPA's 2012 PCB Bulk Product Waste Reinterpretation Memo.

Hand or power tools will be used to remove the concrete inside a negative-pressure containment. The materials will be handled and managed as discussed in Section 4.4.

4.2.5 Removal of CMU Block Wall

As noted, most masonry building components, including CMU walls, will remain and be encapsulated. However, the CMU wall between Vestibule 100G and Lobby 100E, adjacent to paver joint caulking and therefore contaminated with PCBs >1 ppm, is being removed as part of the project. This CMU material will be removed and disposed as PCB Bulk Product Waste in accordance with the EPA's 2012 PCB Bulk Product Waste Reinterpretation Memo.

Hand or power tools will be used to remove the CMU wall inside a negative-pressure containment. The materials will be handled and managed as discussed in Section 4.4.

4.2.6 Removal of Vestibule Entrance Storefront Door Assemblies

Most vestibule entrance storefront door assemblies on the south side of FAC and the northwest corner of SBA are being removed as part of the project. Those being removed are shown on Figure 3b. Two vestibules are located at FAC and one at SBA, and each vestibule has an interior and an exterior storefront door assembly. Several door assemblies are also located in interior lobby areas of FAC. The storefronts are made of non-porous metal and glass. The storefront door assemblies abut paver joint caulking and therefore are assumed to be contaminated with PCBs >10 ug/100 cm^2. In addition, storefront frame perimeter caulk at Vestibule 100A was sampled and

determined to contain 67 ppm of PCBs, and all storefront door frame caulk is assumed to have similar levels of PCBs.

The storefront door assembly frame caulking will be removed and disposed as PCB Bulk Product Waste. The storefront door assemblies being removed will either be disposed as PCB Bulk Product Waste in accordance with the EPA's 2012 PCB Bulk Product Waste Reinterpretation Memo, or decontaminated as discussed in Section 4.2.8.

Hand or power tools will be used to remove the frame caulking and storefront doors inside a negative-pressure containment. The materials will be handled and managed as discussed in Section 4.4.

The inner storefront door at FAC Vestibule 100A, between FAC Lobby 100F and 100H, and the outer storefront door at the entrance vestibule at the northeast corner of Koussevitzky, which abuts the project area, are to remain in place. At these storefronts, the perimeter frame caulking will be removed as discussed above and the storefront frames and glass will be decontaminated as discussed in Section 4.2.8.

4.2.7 Removal of Caulking around Storefront Windows and Newer Pavers

There are four storefront windows (installed in 2011-2012) on the south side of FAC. An epoxy coating was placed on the concrete forming the storefront openings before the new windows were installed, and new caulking was applied around the exterior of the frames. This new perimeter caulking around the storefront windows has been in contact with the epoxy coating the storefront opening concrete for approximately 10 years. Even with the encapsulant, the storefront frame perimeter caulking could potentially have become contaminated with low levels of PCBs migrating through the epoxy encapsulant, as is suggested by the result of one of eight samples of the caulking at a PCB concentration >1 ppm, and would be considered a PCB Remediation Waste.

The same situation may be present for caulking material in joints around new brick pavers in an area in the breezeway between FAC and SBA that were installed in 2010/2011.

The storefront windows are being removed as part of the project to create an enlarged interior space, and the pavers are being removed and replaced. Given the low known and assumed PCB concentrations in the caulking, it will be removed using hand or power tools and disposed as PCB Remediation Waste <50 ppm as discussed in Section 4.4. The window/storefront units will then be decontaminated as described in Section 4.2.8 and the newer pavers will be disposed as regular construction debris.

4.2.8 Decontamination of Non-porous Storefront Doors and Windows

There are several metal and glass storefront door assemblies and windows in FAC (south side), the northeast corner of Koussevitzky, and the northwest corner of SBA that are either being removed, or are to remain in place, as shown on Figure 3b. Some of these are new as of 2010/2011. These non-porous storefront windows and doors are assumed to be contaminated with PCBs >10 ug/100 cm^2, since they abut paver joint caulking and/or have frame perimeter caulking that is considered PCB Bulk Product or PCB Remediation Waste.

When removed, the entire storefront window/door assembly will either be disposed as noted in Section 4.2.6, or decontaminated using a rag moistened with hexane, or other acceptable solvent identified by the abatement subcontractor after PCB-impacted caulk is removed. The most significant cleaning will be needed on portions of the non-porous surfaces beneath and immediately next to the caulk that will have been previously removed.

Any original storefront door assemblies that are to remain in place will be decontaminated using the same procedures.

Work methods will be selected to contain cleaning solvents and prevent their release to the environment. Rags will be used to soak up any excess liquid decontamination solvent. The rags used to decontaminate the non-porous materials will be disposed of as discussed in Section 4.4.

After decontamination is complete, ATC will collect confirmatory wipe samples, as described in Section 4.3, to confirm decontamination has achieved the target clean-up level of 10 ug/100 cm^2.

4.2.9 Removal of Interior Porous Wall and Ramp Materials

There are minor quantities of drywall in Vestibule 100G, Office 125, Office 126, and the Hall outside Office 126, which touch the paver joint caulking. All non-masonry wall materials in the project area are being removed. Drywall and related porous materials (e.g., wood framing) within three feet of a paver joint are assumed to be PCB-contaminated >1 ppm.

Two ramps in lobbies at either end of FAC are also near floor joints and are considered contaminated with PCBs >1 ppm. These ramps are being removed as part of the project.

Finally, storefront windows on the south and north sides of FAC were previously replaced in 2010/2011. At the time they were replaced, any abutting porous wall materials such as wood and drywall were removed to a distance of 1 foot away from the window frames as PCB and asbestos waste. To match work conducted at Hawthorne Hall and Melville Hall in 2015-2017, any remaining porous building materials being removed from within 3 feet of the storefront window frames will be considered to contain PCBs >1 ppm.

This porous wall and ramp material will be removed and disposed as PCB Bulk Product Waste in accordance with the EPA's 2012 PCB Bulk Product Waste Reinterpretation Memo.

Hand or power tools will be used to remove the drywall inside a negative-pressure containment. The materials will be handled and managed as discussed in Section 4.4.

4.2.10 Removal of Carpet Materials

Office 125 and Office 126 were originally part of a lobby on the west end of FAC, and therefore the carpeting material in these two rooms are underlain by brick pavers and associated paver joint caulking. Therefore, the carpeting in these rooms and any underlying materials above the original pavers (like carpet padding and mastic) are assumed to be PCB-contaminated >1 ppm. This carpeting material will be removed and disposed as PCB Bulk Product Waste in accordance with the EPA's 2012 PCB Bulk Product Waste Reinterpretation Memo.

Hand or power tools will be used to remove the carpet materials inside a negative-pressure containment. The materials will be handled and managed as discussed in Section 4.4.

4.2.11 Removal of Door Frame and Adjacent CMU Block/Drywall Walls

There is one single-door frame being removed on the 2nd floor of Koussevitzky, with door frame caulk that has conservatively been classified as PCB Bulk Product Waste (maximum PCB concentration of 67 ppm). Other interior single doors do not have caulk around the frame perimeter. Testing indicates that building materials adjacent to the door frame have been confirmed or are assumed to contain PCBs >1 ppm. The door frame caulk, door frame, and a minimal amount of adjacent wall material (<5 square feet) on one side of the door that is being removed as part of the project will be disposed as PCB Bulk Product Waste in accordance with the EPA's 2012 PCB Bulk Product Waste Reinterpretation Memo.

Hand or power tools will be used to remove the materials inside a negative-pressure containment. The materials will be handled and managed as discussed in Section 4.4. Remaining concrete and CMU walls, and concrete waffle ceiling, near the door frame will be encapsulated as described in the next section.

4.2.12 Coating of Concrete and CMU Masonry Materials

Most of the paver joint caulking within the project area abuts a structural concrete or CMU wall/column or foundation wall (see Photograph Log). The portions of these walls/foundations/columns adjacent to the caulk bead are considered PCB Remediation Waste to a distance of 12 inches above and below the joints. In addition, caulk around door frames and storefront door assemblies is considered PCB Bulk Product Waste and adjacent concrete and CMU walls and concrete waffle ceiling are also considered PCB Remediation Waste to a distance of 12 inches from the joints. Former storefront windows that were replaced in 2010/2011 (north and south sides of FAC) also had PCB-containing perimeter caulk; the interior masonry surfaces within 12 inches of these windows are considered a PCB Remediation Waste and have not yet been coated with epoxy. Finally, existing paint on CMU and concrete walls in two rooms in the west end of the FAC project area (Vestibule 100A and Entry 100B) is also considered a PCB Remediation Waste.

To prevent future exposure and migration of PCBs out of the concrete/CMU where it has been contaminated by adjacent caulk materials, and the paint on masonry surfaces in two FAC rooms, the specified concrete/CMU surfaces will be coated with two coats of an epoxy encapsulant. This includes all CMU and concrete surfaces within 12 inches of a paver joint, door frame, storefront door assembly frame, or storefront window frame, and concrete/CMU walls edge-to-edge in Vestibule 100A and Entry 100B.

Prior to epoxy application, the concrete/CMU surfaces will be cleaned with a HEPA vacuum and/or wiped with rags to clean the surface sufficiently to prepare a surface ready to accept the coating materials. Cleaning materials will be managed as PCB Remediation Waste as discussed in Section 4.4.

Two coats of coating material (Sherwin Williams B58W00610 - Macropoxy® 646 Fast Cure Epoxy), with the basecoat yellow, will then be applied to the specified areas of masonry and allowed to cure. Manufacturer's product specifications are attached in Appendix E. Additional coat(s) of paint/waterproofing materials may be applied over the epoxy layers to enable color/texture matching to existing surfaces.

4.2.13 Installation of Carpet in Entry 100B

As noted previously, Entry 100B is outside the formal project area. However, brick pavers with PCB Bulk Product caulking in perimeter joints are located in this area. The caulking will be removed as required by TSCA, and disposed as PCB Bulk Product. However, due to cost, the brick pavers will remain in place and be covered with a moisture mitigation system and carpet. This flooring material will serve to cover and encapsulate the pavers, preventing exposure to the pavers and migration of PCBs out of the pavers. Above the brick pavers to remain will be installed a vapor barrier membrane, cement levelling compound, and carpet. The product literature for these products is provided in Appendix G.

4.3 Planned Post-Abatement Confirmatory Sampling

Two types of confirmatory samples, with subsequent laboratory analysis, will be collected following abatement. Each type is discussed in the following subsections.

4.3.1 Wipe Samples on Coated Masonry Surfaces

To confirm that the epoxy coating systems are adequately sealing residual PCBs in concrete/CMU surfaces, ATC will perform confirmatory surface wipe sampling of the coating on these masonry surfaces, at the following locations:

1. 6 wipe samples at evenly distributed locations along the base of coated concrete and CMU walls/columns/foundation walls, adjacent to former paver joints;

2. 4 wipe samples at locations on the coated perimeter of storefront window openings on the south and north sides of FAC;
3. 2 wipe samples on coated walls in Vestibule 100A/Entry 100B; and
4. 4 wipe samples on coated walls and ceilings next to former storefront door assemblies in FAC and SBA; and
5. 1 wipe sample on coated masonry wall surfaces adjacent to the interior doorway on the 2nd floor of Koussevitzky.

The samples will be collected after encapsulants have been applied and allowed to cure. The sample wipe area at each location will be conservatively placed as close as possible to the location of the former caulk bead, where underlying residual PCBs in concrete would be expected to be the highest.

The wipe samples will be collected in accordance with 40 CFR 761.123, per standard wipe test protocols identified in Wipe Sampling and Double Wash/Rinse Cleanup as recommended by the Environmental Protection Agency PCB Spill Cleanup Policy (June 23, 1987, Revised and Clarified on April 18, 1991). A one-use template will be used to delineate the 100 cm^2 sampling area. One duplicate sample will be collected for every 20 samples, and one blank sample will be submitted for the project. The samples will be submitted to a certified laboratory for analysis using soxhlet extraction and analysis for PCB Aroclors using EPA Method 8082.

The target PCB concentration in wipe samples considered acceptable will be 10 ug/100 cm^2, which is the cleanup standard for non-porous surfaces outlined in TSCA for high-occupancy areas.

4.3.2 Wipe Samples on Decontaminated Non-Porous Surfaces

To confirm that the cleaning of non-porous metal and glass storefront door assemblies and storefront windows are adequately removing residual PCBs from these surfaces, ATC will perform confirmatory surface wipe sampling of the surfaces. One wipe sample will be collected from each storefront door assembly and/or storefront window being removed or that is original to the building and remaining in place, for a total of 14 samples. Samples will not be collected on the storefront windows on the north side of FAC, which are new as of 2010/2011 and therefore are not considered to be PCB-contaminated.

The samples will be collected and analyzed as noted in the previous section.

The target PCB concentration in wipe samples considered acceptable will be 10 ug/100 cm^2, which is the cleanup standard for non-porous surfaces outlined in TSCA for high-occupancy areas.

4.4 Waste Management

The types of waste to be generated for off-Site disposal during the risk-based clean-up described in Section 4 will include:

1) PCB-containing sealant (caulk) in paver joints and around storefront window frames, storefront door assembly frames, and door frames (PCB Bulk Product Waste with asbestos);
2) PCB-containing brick pavers and associated mortar on exterior of FAC building within 8 inches of paver joint caulk, and underlying granular sub-base material (considered together with adjacent caulking to be PCB Bulk Product Waste);
3) All PCB-containing brick pavers and associated mortar on interior of FAC building, and underlying granular sub-base material (considered together with adjacent caulking to be PCB Bulk Product Waste);
4) CMU block walls (considered together with adjacent caulking to be PCB Bulk Product Waste);

5) Sorefront window frames, storefront door assembly frames, and door frames (considered together with adjacent caulking to be PCB Bulk Product Waste) if not decontaminated to TSCA standards;
6) Drywall and wood materials (considered together with adjacent caulking to be PCB Bulk Product Waste);
7) Carpet and underlayment (considered together with adjacent caulking to be PCB Bulk Product Waste);
8) Concrete steps on interior and sills beneath storefront windows and doors on south side of FAC and northwest corner of SBA (considered together with adjacent caulking to be PCB Bulk Product Waste);
9) Storefront window perimeter caulking and limited paver joint caulking that was installed in 2010-2011 (PCB Remediation Waste);
10) PPE, cleaning materials, and containment materials (PCB Remediation Waste);
11) Particulates and filters from dust management (PCB Remediation Waste); and
12) Disposal tools and tools that cannot be decontaminated (PCB Remediation Waste).

The PCB-containing materials will be placed in double polyethylene bags, double-lined barrels or other approved containers, or wrapped in a double layer of polyethylene sheeting, within the work zone. Waste containers/bags will then be sealed, cleaned, and transported to the PCB waste storage area for management as discussed below.

Small waste bags/containers will be placed in appropriate sealable containers in the waste storage area, which may consist of drums, Gaylord boxes, or roll-off dumpsters. Roll-off dumpsters, if used, will be double-lined with 6-mil polyethylene sheeting.

PCB waste containers will be placed in a secure area designated by BCC. The storage containers will be placarded/labeled as containing PCB waste with markings meeting the EPA requirements of 40 CRF 761.40 and 761.45. All PCB waste storage will meet the requirements of 40 CFR 761.65.

All solid PCB wastes classified as PCB Bulk Product Waste, asbestos, or both will be transported off-Site in fully enclosed dumpsters or containers to a licensed facility able to accept PCB Bulk Product Waste and asbestos under TSCA and other applicable regulations. EPA will be notified of the proposed facility for this waste. The wastes will be shipped using a Uniform Hazardous Waste Manifest, unless the contractor obtains an exemption from the Massachusetts Department of Environmental Protection. Copies of the final completed manifests, along with Certificates of Disposal, will be included in a closure report to EPA.

All solid PCB wastes classified as PCB Remediation Waste, with or without asbestos, will be transported off-Site in fully enclosed containers to a licensed facility able to accept PCB Remediation Waste and/or asbestos under TSCA and other applicable regulations. EPA will be notified of the proposed facility for this waste. The wastes will be shipped using a Uniform Hazardous Waste Manifest, unless the contractor obtains an exemption from the Massachusetts Department of Environmental Protection. Copies of the final completed manifests, along with Certificates of Disposal, will be included in a closure report.

5 Maintenance of Remaining PCB Remediation Waste

Maintenance and monitoring of the concrete/CMU ceilings, walls, columns, and foundations that will be encapsulated as part of this project, and pavers remaining in Entry 100B, will be incorporated into the campus-wide Maintenance and Monitoring Plan (MMP) currently being drafted for BCC. This MMP will be submitted to EPA for review and approval in the near future.

6 Owner Certification

This section of the Notification provides the certification required by 40 CFR 761.61(a)(3)(i)(E).

I certify that the Amendment to the Risk-Based Cleanup Plan proposed in this document will meet the following requirements:

All sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the cleanup site are or will be on file at the following location and are available for U.S. EPA inspection:

Entity:	The Commonwealth of Massachusetts Executive Office for Administration and Finance Division of Capital Asset Management and Maintenance Office of Planning, Design and Construction for Berkshire Community College
Address:	John W. McCormack Building One Ashburton Place, 15th Floor Boston, Massachusetts 02108
Contact:	Orville Henry, Project Manager
Email:	orville.henry@state.ma.us
Telephone:	(617) 727-4050 Ext 31249

Signature

7/24/2020

Date

TABLE 2
PCB Analytical Results for Sealants
Field Admininstration Center
Berkshire Community College
1350 West Street
Pittsfield, Massachusetts

Sample ID	Date Sampled	Building	Exterior/ Interior	Room/Location	Setting of Material Sampled	Materials Between	PCB Aroclor (ppm)									TOTAL PCBs (ppm)
							1016	1221	1232	1242	1248	1254	1260	1262	1268	
BCC-01	10/25/19	Koussevitsky	Interior	Lobby K210M	Door Frame - Hall Side	Steel Door Frame & CMU/Concrete/Drywall	<3.4	**4.6**	<3.4	<3.4	<3.4	**11**	<3.4	<3.4	<3.4	**15.6**
BCC-02	10/25/19				Door Frame - Room Side	Steel Door Frame & CMU/Concrete/Drywall	<17	<17	<17	<17	<17	**67**	<17	<17	<17	**67**
BCC-03	10/25/19	Field	Exterior	Storefront Windows	Window Frame Perimeter	Steel Window Frame & Concrete	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	ND
BCC-04	10/25/19						<0.75	<0.75	<0.75	<0.75	<0.75	**1.0**	<0.75	<0.75	<0.75	**1.0**
FAC-SF-L-Bottom	01/16/20						<0.79	<0.79	<0.79	<0.79	<0.79	<0.79	<0.79	<0.79	<0.79	ND
FAC-SF-LM-Bottom	01/16/20						<0.74	<0.74	<0.74	<0.74	<0.74	**2.4**	<0.74	<0.74	<0.74	**2.4**
FAC-SF-L Rside	01/16/20						<0.69	<0.69	<0.69	<0.69	<0.69	<0.69	<0.69	<0.69	<0.69	ND
FAC-SF-R-Bottom	01/16/20						<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	ND
FAC-SF-R-LSide	01/16/20						<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	ND
FAC-SF-RM-LSide	01/16/20						<0.72	<0.72	<0.72	<0.72	<0.72	<0.72	<0.72	<0.72	<0.72	ND
BCC-05	10/25/19			Exterior Walkway	Paver Joint	Pavers & Concrete at Building	<180	<180	<180	<180	<180	<180	**3,400**	<180	<180	**3,400**
BCC-06	10/25/19					Pavers & Concrete Columns	<370	<370	<370	<370	<370	<370	**6,400**	<370	<370	**6,400**
BCC-07	10/25/19		Interior	Men's Bathroom	Ceiling Joints	Plaster ceiling and CMU walls	<3.7	<3.7	<3.7	<3.7	<3.7	**18**	<3.7	<3.7	<3.7	**18**
BCC-08	10/25/19			Vestibule 100G	CMU Joint	CMU Block Wall & Concrete Ceiling	<3.6	<3.6	<3.6	<3.6	<3.6	**13**	<3.6	<3.6	<3.6	**13**
BCC-09	10/25/19			Vestibule 100E		CMU Block Wall & Concrete Ceiling	<0.75	<0.75	<0.75	**1.5**	<0.75	**3.6**	<0.75	<0.75	<0.75	**5.1**
BCC-11	10/25/19			Vestibule 100G	Door Frame - Interior	Steel Frame & Concrete/CMU	<0.75	<0.75	<0.75	<0.75	<0.75	**3.3**	<0.75	<0.75	<0.75	**3.3**
BCC-12	10/25/19			Lobby 100F			<0.75	<0.75	<0.75	<0.75	<0.75	**0.97**	<0.75	<0.75	<0.75	**0.97**
BCC-13	10/25/19			Entry 100B			<17	<17	<17	<17	<17	**37**	<17	<17	<17	**37**
BCC-16	10/25/19			Vestibule 100A			<19	<19	<19	<19	<19	**67**	<19	<19	<19	**67**
BCC-14	10/25/19			Lobby 100E	Paver Joint	Pavers & Concrete Steps	<0.73	<0.73	<0.73	**1.4**	<0.73	**8.8**	**2.3**	<0.73	<0.73	**12.5**
BCC-15	10/25/19			Hall Outside Rm 126		Pavers & Concrete Steps	<4,800	<4,800	<4,800	<4,800	<4,800	**110,000**	**18,000**	<4,800	<4,800	**128,000**
BCC-10	10/25/19			Vestibule 100G		Pavers at Middle of Vestibule	<92	<92	<92	<92	<92	**1,500**	<92	<92	<92	**1,500**
BCC-17	10/25/19			Vestibule 100A		Pavers at Middle of Vestibule	<9,700	<9,700	<9,700	<9,700	<9,700	**180,000**	**29,000**	<9,700	<9,700	**209,000**
05-18	11/26/19			Vestibule 100G		Pavers & Concrete Walls	<190	<190	<190	<190	<190	<190	**3,200**	<190	<190	**3,200**
05-19	11/26/19					Pavers & CMU Walls	<91	<91	<91	<91	<91	<91	**1,300**	<91	<91	**1,300**
05-20	11/26/19			Lobby 100F		Pavers & Concrete Walls	<190	<190	<190	<190	<190	<190	**3,400**	<190	<190	**3,400**
05-21	11/26/19			Lobby 100E		Pavers & CMU Walls	<0.75	<0.75	<0.75	<0.75	<0.75	**5.6**	<0.75	<0.75	<0.75	**5.6**
05-22	11/26/19			Hall Outside Rm 126		Pavers near Edge of Hall	<3,500	<3,500	<3,500	<3,500	<3,500	**110,000**	**16,000**	<3,500	<3,500	**126,000**

Notes
Units in milligrams per kilogram (mg/kg, or parts per million - ppm).
"<" = Not detected above the noted reporting limit.
Bold = PCB concentration above laboratory reporting limit.
Shaded = PCB concentration above 50 ppm.
ND = PCBs not detected.
CMU = Concrete Masonry Unit block.

TABLE 3
PCB Analytical Results for Substrate Building Materials
Field Admininstration Center
Berkshire Community College
1350 West Street
Pittsfield, Massachusetts

Sample ID	Date Sampled	Building	Exterior/ Interior	Room/ Location	Nearest Caulk Type	Max PCBs in Nearest Caulk Type (ppm)*	Sampled Material	Underlying Material	Material Painted?	Distance from Caulk (inches)	PCB Aroclor (ppm)									TOTAL PCBs (ppm)
											1016	1221	1232	1242	1248	1254	1260	1262	1268	
KY-CMU20/DF(12")	1/17/20	Kouss.	Interior	Lobby K210M	Door Frame Caulk	67	CMU (Wall)	NA	No	12"	<0.089	<0.089	<0.089	<0.089	<0.089	**0.38**	<0.089	<0.089	<0.089	**0.38**
FAC-IntCMU6/DF (0")	1/17/20	Field Admin.		Vestibule 100G	Door Frame Caulk	67		NA	Yes	0" (adj.)	<1.0	<1.0	<1.0	<1.0	<1.0	**4.2**	<1.0	<1.0	<1.0	**4.2**
FAC-IntCMU6/DF (12")										12"	<1.0	<1.0	<1.0	<1.0	<1.0	**1.1**	<1.0	<1.0	<1.0	**1.1**
FAC-IntCMU8/Paver (16")	1/17/20	Field Admin.		Vestibule 100G	Paver Joint Caulk (Int.)	209,000		NA	Yes	16"	<0.73	<0.73	<0.73	<0.73	<0.73	**3.1**	<0.73	<0.73	<0.73	**3.1**
FAC-IntCMU8/Paver (24")										24"	<0.097	<0.097	<0.097	<0.097	<0.097	**1.7**	<0.097	<0.097	<0.097	**1.7**
FAC-IntCMU16/Paver (16")	1/17/20	Field Admin.		Vestibule 100A	Paver Joint Caulk (Int.)	209,000		NA	Yes	16"	<1.4	<1.4	<1.4	<1.4	<1.4	**6.1**	<1.4	<1.4	<1.4	**6.1**
FAC-IntCMU16/Paver (24")										24"	<0.47	<0.47	<0.47	<0.47	<0.47	**3.5**	<0.47	<0.47	<0.47	**3.5**
FAC-IntCMU11 (6')	3/18/20	Field Admin.		Vestibule 100A	Door Frame Caulk	67		NA	Paint Removed	6 feet	<0.095	<0.095	<0.095	<0.095	**1.4**	**1.5**	<0.095	<0.095	<0.095	**2.9**
FAC-IntCMU4 (6')	3/18/20	Field Admin.		Office 108	N/A	N/A		NA	Paint Removed	6 feet	<0.095	<0.095	<0.095	<0.095	**0.11**	<0.095	<0.095	<0.095	<0.095	**0.11**
FAC-IntCMU10 (6')	3/18/20	Field Admin.		Office 126	Paver Joint Caulk	209,000		NA	Paint Removed	6 feet	<1.7	<1.7	<1.7	<1.7	<1.7	**13**	<1.7	<1.7	<1.7	**13**
KY-IntCMU12 (6')	3/18/20	Kouss.		Narrow side room	Door Frame Caulk	67		NA	No	6 feet	<0.091	<0.091	<0.091	<0.091	**0.14**	**0.28**	<0.091	<0.091	<0.091	**0.42**

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Sample ID	Date Sampled	Building	Exterior/ Interior	Room/ Location	Nearest Caulk Type	Max PCBs in Nearest Caulk Type (ppm)*	Sampled Material	Underlying Material	Material Painted?	Distance from Caulk (inches)	PCB Aroclor (ppm)									TOTAL PCBs (ppm)
											1016	1221	1232	1242	1248	1254	1260	1262	1268	
KY-IntCW9 (5')	3/18/20	Kouss.	Interior	Lobby K210M	Door Frame Caulk	67	Concrete (wall/column)	NA	Yes	5 feet	<0.10	<0.10	<0.10	<0.10	**0.16**	**0.16**	<0.10	<0.10	<0.10	**0.32**
KY-CW19/DF (0")	1/17/20	Kouss.		Lobby K210M	Door Frame Caulk	67		NA	Yes	0" (adj.)	<0.37	<0.37	<0.37	<0.37	<0.37	**2.9**	<0.37	<0.37	<0.37	**2.9**
KY-CW19/DF (8")										12"	<0.098	<0.098	<0.098	<0.098	<0.098	**2.4**	<0.098	<0.098	<0.098	**2.4**
FAC-INTCC (BW)17/ Paver (12")	1/17/20	Field Admin.		Hallway outside Rm. 126	Paver Joint Caulk (Int.)	209,000		NA	Yes	12"	<0.42	<0.42	<0.42	<0.42	<0.42	**3.2**	<0.42	<0.42	<0.42	**3.2**
FAC-INTCC (BW)17/ Paver (24")										24"	<0.094	<0.094	<0.094	<0.094	<0.094	**1.7**	<0.094	<0.094	<0.094	**1.7**
FAC-IntCW13/DF (0")	1/17/20	Field Admin.		Vestibule 100A	Door Frame Caulk	67		NA	Yes	0" (adj.)	<0.98	<0.98	<0.98	<0.98	<0.98	**6.3**	**1.5**	<0.98	<0.98	**7.8**
FAC-IntCW13/DF (12")										12"	<0.99	<0.099	<0.099	<0.099	<0.099	**7**	**2.3**	<0.099	<0.98	**9.3**
FAC-INTCW7/Paver (12")	1/17/20	Field Admin.		Vestibule 100G	Paver Joint Caulk (Int.)	209,000		NA	Yes	12"	<0.098	<0.098	<0.098	<0.098	<0.098	**1**	**0.11**	<0.098	<0.098	**1.11**
FAC-INTCW7/Paver (24")	1/17/20									24"	<0.098	<0.098	<0.098	<0.098	<0.098	**0.96**	<0.098	<0.098	<0.098	**0.96**
FAC-INTCW10/Paver (12")	1/17/20	Field Admin.		Lobby 100E	Paver Joint Caulk (Int.)	209,000		NA	Yes	12"	<0.088	<0.088	<0.088	<0.088	<0.088	**0.56**	**0.16**	<0.088	<0.088	**0.72**
FAC-INTCW11/Paver (12")	1/17/20	Field Admin.		Lobby 100F	Paver Joint Caulk (Int.)	209,000		NA	Yes	12"	<0.082	<0.082	<0.082	<0.082	<0.082	**1.2**	**0.3**	<0.082	<0.082	**1.5**
FAC-INTCW11/Paver (24")										24"	<0.10	<0.10	<0.10	<0.10	<0.10	**0.8**	<0.10	<0.10	<0.10	**0.8**
FAC-INTCW15/Paver (12")	1/17/20	Field Admin.		Vestibule 100A	Paver Joint Caulk (Int.)	209,000		NA	Yes	12"	<2.0	<2.0	<2.0	<2.0	<2.0	**11**	**3.3**	<2.0	<2.0	**14.3**
FAC-INTCW15/Paver (24")										24"	<0.92	<0.92	<0.92	<0.92	<0.92	**5.9**	**2.2**	<0.92	<0.92	**8.1**
FAC-IntCW7 (5')	3/18/20	Field Admin.		Hallway	Door Frame Caulk	67		NA	Paint Removed	5 feet	<0.087	<0.087	<0.087	<0.087	<0.087	**0.23**	<0.087	<0.087	<0.087	**0.23**
FAC-IntCW5 (7')	3/18/20	Field Admin.		Hallway	N/A	N/A		NA	Paint Removed	7 feet	<0.10	<0.10	<0.10	<0.10	<0.10	**0.27**	<0.10	<0.10	<0.10	**0.27**
FAC-IntCW6 (5')	3/18/20	Field Admin.		Hallway	N/A	N/A		NA	Paint Removed	5 feet	<0.10	<0.10	<0.10	<0.10	<0.10	**0.34**	**0.95**	<0.10	<0.10	**1.29**
FAC-IntCW1 (6')	3/18/20	Field Admin.		Vestibule 100A	Door Frame Caulk	67		NA	Paint Removed	6 feet	<0.095	<0.095	<0.095	<0.095	<0.095	**1**	<0.095	<0.095	<0.095	**1**
FAC-IntCW8 (5')	3/18/20	Field Admin.		Vesitbule 100G	Door Frame Caulk	67		NA	Paint Removed	5 feet	<0.095	<0.095	<0.095	<0.095	<0.095	**0.54**	**0.38**	<0.095	<0.095	**0.92**
FAC-IntCW2 (6')	3/18/20	Field Admin.		Entry 100B	Paver Joint Caulk	209,000		NA	Paint Removed	6 feet	<0.50	<0.50	<0.50	<0.50	<0.50	**3.1**	**4**	<0.50	<0.50	**7.1**
FAC-IntCW3 (6')	3/18/20	Field Admin.		Entry 100B	Paver Joint Caulk	209,000		NA	Paint Removed	6 feet	<0.091	<0.091	<0.091	<0.091	<0.091	**0.37**	**0.33**	<0.091	<0.091	**0.7**
FAC-Int-Ceiling-01	3/18/20	Field Admin.	Interior	Entry 100B	N/A	N/A	Concrete (ceiling)	NA	No	NA	<0.12	<0.12	<0.12	<0.12	**0.28**	**0.9**	<0.12	<0.12	<0.12	**1.18**
FAC-Int-Ceiling-02	3/18/20	Field Admin.		Vestibule 100G	N/A	N/A		NA	No	NA	<0.095	<0.095	<0.095	<0.095	<0.095	**0.47**	**0.15**	<0.095	<0.095	**0.62**
FAC-Int-Ceiling-03	3/18/20	Field Admin.		Lobby 100H	N/A	N/A		NA	No	NA	<0.091	<0.091	<0.091	<0.091	**0.83**	**2**	**0.6**	<0.091	<0.091	**3.43**

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Sample ID	Date Sampled	Building	Exterior/ Interior	Room/ Location	Nearest Caulk Type	Max PCBs in Nearest Caulk Type (ppm)*	Sampled Material	Underlying Material	Material Painted?	Distance from Caulk (inches)	PCB Aroclor (ppm)									TOTAL PCBs (ppm)
											1016	1221	1232	1242	1248	1254	1260	1262	1268	
FAC-IntPaver18/Stair (6")	1/17/20	Field Admin.	Interior	Hallway outside Rm. 126	Paver Joint Caulk (Int.)	209,000	Paver	NA	No	6"	<0.49	<0.49	<0.49	<0.49	<0.49	**3.9**	<0.49	<0.49	<0.49	**3.9**
FAC-IntPaver18/Stair (12")										12"	<0.49	<0.49	<0.49	<0.49	<0.49	**3.3**	**0.57**	<0.49	<0.49	**3.87**
FAC-IntPaver18/Stair (24")										24"	<0.10	<0.10	<0.10	<0.10	<0.10	**2.1**	<0.10	<0.10	<0.10	**2.1**
FAC-IntPaver18/Stair (36")										36"	<0.49	<0.49	<0.49	<0.49	<0.49	**2.6**	<0.49	<0.49	<0.49	**2.6**
FAC-IntPavers9/CW (8")	1/17/20	Field Admin.		Vestibule 100G	Paver Joint Caulk (Int.)	209,000		NA	No	8"	<0.098	<0.098	<0.098	<0.098	<0.098	**0.32**	<0.098	<0.098	<0.098	**0.32**
FAC-IntPaver12/CW (6")	1/17/20	Field Admin.		Lobby 100F	Paver Joint Caulk (Int.)	209,000		NA	No	6"	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	ND
FAC-IntMiddlePaver14 (8")	1/17/20	Field Admin.		Vestibule 100A	Paver Joint Caulk (Int.)	209,000		NA	No	8"	<4.0	<4.0	<4.0	<4.0	<4.0	**27**	<4.0	<4.0	<4.0	**27**
FAC-IntMiddlePaver14 (12")										12"	<5.0	<5.0	<5.0	<5.0	<5.0	**29**	<5.0	<5.0	<5.0	**29**
FAC-IntMiddlePaver14 (24")										24"	<0.98	<0.98	<0.98	<0.98	<0.98	**6**	<0.98	<0.98	<0.98	**6**
FAC-IntMiddlePaver14 (36")										36"	<3.9	<3.9	<3.9	<3.9	<3.9	**22**	<3.9	<3.9	<3.9	**22**
FAC-ExtPaver 1/ CW (8")	1/16/20	Field Admin.	Exterior	Exterior Walkway	Paver Joint Caulk (Ext.)	6,400	Paver**	NA	No	8"	<0.080	<0.080	<0.080	<0.080	<0.080	**0.08**	**0.19**	<0.080	<0.080	**0.27**
FAC-ExtPaver 2/ CC (8")	1/16/20	Field Admin.		Exterior Walkway	Paver Joint Caulk (Ext.)	6,400		NA	No	8"	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	ND
FAC-PaverSubbase A	1/16/20	Field Admin.		Exterior Walkway	Paver Joint Caulk (Ext.)	6,400	Granular Sub-base	NA	NA	Below	<0.091	<0.091	<0.091	<0.091	<0.091	**1.3**	**1.3**	<0.091	<0.091	**2.6**
FAC-PaverSubbase B	1/16/20	Field Admin.		Exterior Walkway	Paver Joint Caulk (Ext.)	6,400		NA	NA	Below	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	**1.6**	<0.099	<0.099	**1.6**
FAC-CC4/Paver (12")	1/16/20	Field Admin.	Exterior	Exterior Walkway	Paver Joint Caulk (Ext.)	6,400	Concrete (wall/column)	NA	Yes	12"	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	ND
FAC-CC5/Paver (12")	1/16/20	Field Admin.		Exterior Walkway	Paver Joint Caulk (Ext.)	6,400		NA	Yes	12"	<0.093	<0.093	<0.093	<0.093	<0.093	<0.093	<0.093	<0.093	<0.093	ND
KY-CW3/Paver (12")	1/16/20	Kouss.		Exterior Walkway	Paver Joint Caulk (Ext.)	6,400		NA	Yes	12"	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.94	ND

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											1016	1221	1232	1242	1248	1254	1260	1262	1268	
KY-IntPaint12 (6')	3/18/20	Kouss.	Interior	Lobby K210M	Door Frame Caulk	67	Paint	CMU	NA	6 feet	<1.5	<1.5	<1.5	<1.5	<1.5	**16**	<1.5	<1.5	<1.5	**16**
FAC-IntPaint1 (6')	3/18/20	Field Admin.	Interior	Vestibule 100A	Door Frame Caulk	67		Concrete (wall)	NA	6 feet	<9.7	<9.7	<9.7	<9.7	<9.7	**180**	<9.7	<9.7	<9.7	**180**
FAC-IntPaint8 (5')	3/18/20	Field Admin.		Vesitbule 100G	Door Frame Caulk	67		Concrete (wall)	NA	5 feet	<1.9	<1.9	<1.9	<1.9	<1.9	**12**	<1.9	<1.9	<1.9	**12**
FAC-IntPaint2 (6')	3/18/20	Field Admin.		Entry 100B	Paver Joint Caulk	209,000		Concrete (wall)	NA	6 feet	<9.0	<9.0	<9.0	<9.0	<9.0	**190**	**55**	<9.0	<9.0	**245**
FAC-IntPaint3 (6')	3/18/20	Field Admin.		Entry 100B	Paver Joint Caulk	209,000		Concrete (wall)	NA	6 feet	<9.6	<9.6	<9.6	<9.6	<9.6	**190**	**23**	<9.6	<9.6	**113**
KY-IntPaint9 (5')	3/18/20	Kouss.		Lobby K210M	Door Frame Caulk	67		Concrete (column)	NA	5 feet	<1.7	<1.7	<1.7	<1.7	<1.7	**22**	<1.7	<1.7	<1.7	**22**
FAC-IntPaint 7 (5')	3/18/20	Field Admin.		Hallway	Door Frame Caulk	67		Concrete (column)	NA	5 feet	<1.8	<1.8	<1.8	<1.8	<1.8	**10**	<1.8	<1.8	<1.8	**10**
FAC-IntPaint5 (7')	3/18/20	Field Admin.		Hallway	N/A	N/A		Concrete (column)	NA	7 feet	<2.0	<2.0	<2.0	<2.0	<2.0	**14**	<2.0	<2.0	<2.0	**14**
FAC-IntPaint6 (5')	3/18/20	Field Admin.		Hallway	N/A	N/A		Concrete (column)	NA	5 feet	<1.9	<1.9	<1.9	<1.9	<1.9	**13**	**9.4**	<1.9	<1.9	**22.4**
FAC-IntPaint11 (6')	3/18/20	Field Admin.		Vestibule 100A	Door Frame Caulk	67		CMU	NA	6 feet	<8.7	<8.7	<8.7	<8.7	<8.7	**86**	<8.7	<8.7	<8.7	**86**
FAC-IntPaint4 (6')	3/18/20	Field Admin.		Office 108	N/A	N/A		CMU	NA	6 feet	<0.83	<0.83	<0.83	<0.83	<0.83	**3.4**	**4.1**	<0.83	<0.83	**7.5**
FAC-IntPaint10 (6')	3/18/20	Field Admin.		Office 126	Paver Joint Caulk	209,000		CMU	NA	6 feet	<0.095	<0.095	<0.095	<0.095	**0.5**	**0.21**	<0.095	<0.095	<0.095	**0.71**

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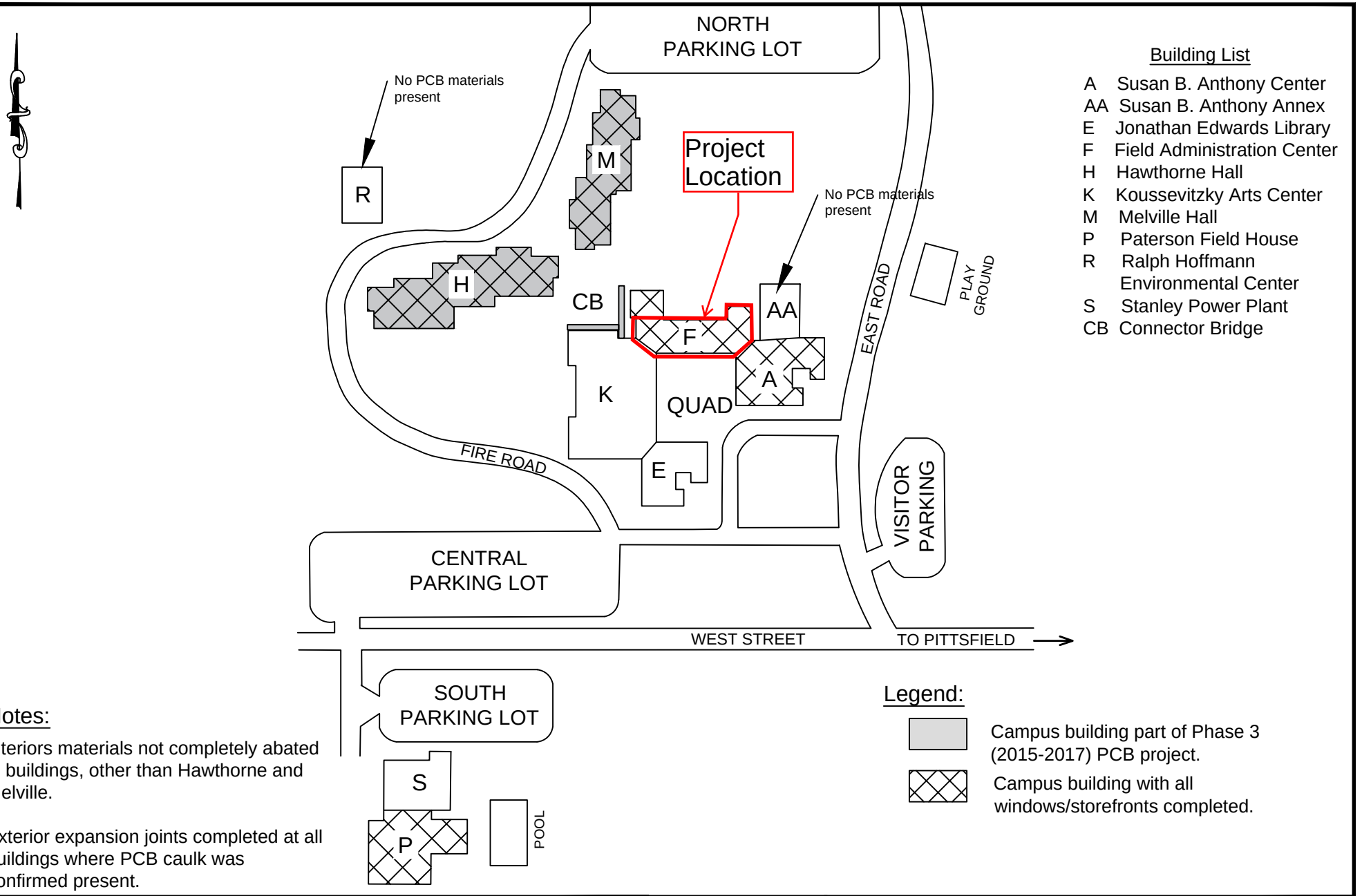
Relevant Results from 2011 Samples at FAC and Susan B. Anthony Center (SBA)																				
BCC-01	7/5/11	FAC/SBA	Exterior	Exterior Walkway	Paver Joint Caulk (Ext.)	Undetermined	Paver	NA	No	8"	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	ND
BCC-03		FAC									<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	ND
BCC-05		SBA									<0.140	<0.140	<0.140	<0.140	<0.140	<0.140	<0.140	<0.140	<0.140	ND
BCC-07		FAC									<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	ND
BCC-09		SBA									<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	ND
BCC-11		FAC									<0.092	<0.092	<0.092	<0.092	<0.092	<0.092	<0.092	<0.092	<0.092	ND
BCC-02		FAC/SBA					Mortar	NA	No	8"	<0.090	<0.090	<0.090	<0.090	<0.090	<0.090	<0.090	<0.090	<0.090	ND
BCC-04		FAC									<0.093	<0.093	<0.093	<0.093	<0.093	<0.093	<0.093	<0.093	<0.093	ND
BCC-06		SBA									<0.099	<0.099	<0.099	<0.099	<0.099	**0.13**	<0.099	<0.099	<0.099	**0.13**
BCC-08		FAC									<0.084	<0.084	<0.084	<0.084	<0.084	<0.084	<0.084	<0.084	<0.084	ND
BCC-10		SBA									<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	ND
BCC-12		FAC									<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	ND
Relevant Results from 2011 Samples at FAC and SBA																				
FAC-01	7/13/11	FAC	Exterior	Exterior Walkway	Paver Joint Caulk (Ext.)	Undetermined	Concrete Underslab (Beneath Sub-base Underlying Pavers)	NA	No	Below	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	ND
FAC-02											<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	ND
FAC-03											<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	ND
FAC-04											<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	ND
FAC-05											<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	ND
FAC-06											<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	ND
SA-01		SBA									<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	ND
SA-02											<0.093	<0.093	<0.093	<0.093	<0.093	<0.093	<0.093	<0.093	<0.093	ND
SA-03											<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	ND
SA-04											<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	ND
SA-05											<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	<0.098	ND
SA-06											<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	ND

Notes
Units in milligrams per kilogram (mg/kg, or parts per million - ppm).
"<" = Not detected above the noted reporting limit.
Bold = PCB concentration above laboratory reporting limit.
Orange-Shaded = PCB concentration above 1 ppm.
ND = PCBs not detected.
CMU = Concrete Masonry Unit block.
*See "Sealant Sample Analytical Data" Table
** See also 2012 paver sample results below.

Figure 1: Site Vicinity Map

Source:
USGS 7.5 Minute
Pittsfield West, MA Quadrangle Map
Scale: 1:24,000
(2012)

Berkshire Community College
1350 West Street Pittsfield
Massachusetts 012101



Building List

A Susan B. Anthony Center
AA Susan B. Anthony Annex
E Jonathan Edwards Library
F Field Administration Center
H Hawthorne Hall
K Koussevitzky Arts Center
M Melville Hall
P Paterson Field House
R Ralph Hoffmann Environmental Center
S Stanley Power Plant
CB Connector Bridge

Notes:

Interiors materials not completely abated in buildings, other than Hawthorne and Melville.

Exterior expansion joints completed at all buildings where PCB caulk was confirmed present.

Legend:

Campus building part of Phase 3 (2015-2017) PCB project.

Campus building with all windows/storefronts completed.

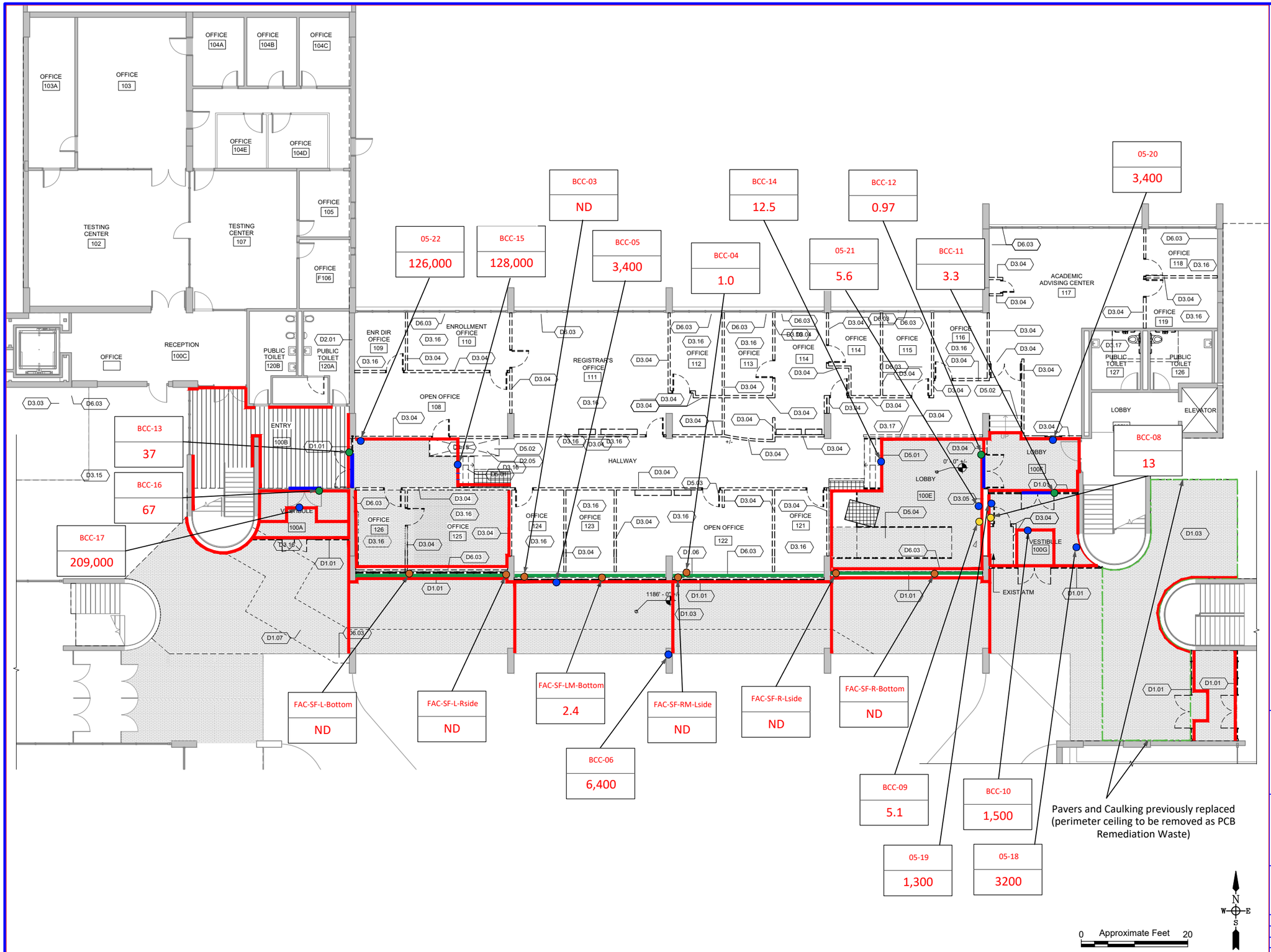
CAMPUS SITE PLAN

PCB ABATEMENT PROJECT
BERSHIRE COMMUNITY COLLEGE
PITTSFIELD, MASSACHUSETTS

Source: Berkshire Community College (2009)

ATC
ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING
10 State Street, Suite 100
Woburn, Massachusetts 01801-6350
Tel.(781)932-9400 Fax.(781)932-6211

PROJECT NUMBER: 183BS01017	FIGURE NUMBER: 2
SCALE: Not To Scale	DATE: 1/2/20
DRAWING FILE: SITE PLAN - 1.29.18	DRAWN BY: FGB CHECKED BY: DPW



Legend

- Floor Caulk Sample Location
- Door Caulk Sample Location
- Window Caulk Sample Location
- Ceiling Caulk Sample Location
- ABC-123 — Caulk Sample ID
- 1,234 — Total PCB Concentration (parts per million)
- Pavers and Caulking previously replaced

PCB-Contaminated Building Materials to be Removed:

- Floor Joint Caulk
- Window Frame Caulk
- Door Frame Caulk

General Notes:

Base map from "Ground Floor Demo Plan", prepared by Dietz & Company Architects Inc. of Springfield, MA, dated 10/18/2019 .

NAME/ADDRESS:

Berkshire Community College
Field Administration Center
1350 West Street
Pittsfield, MA 01201

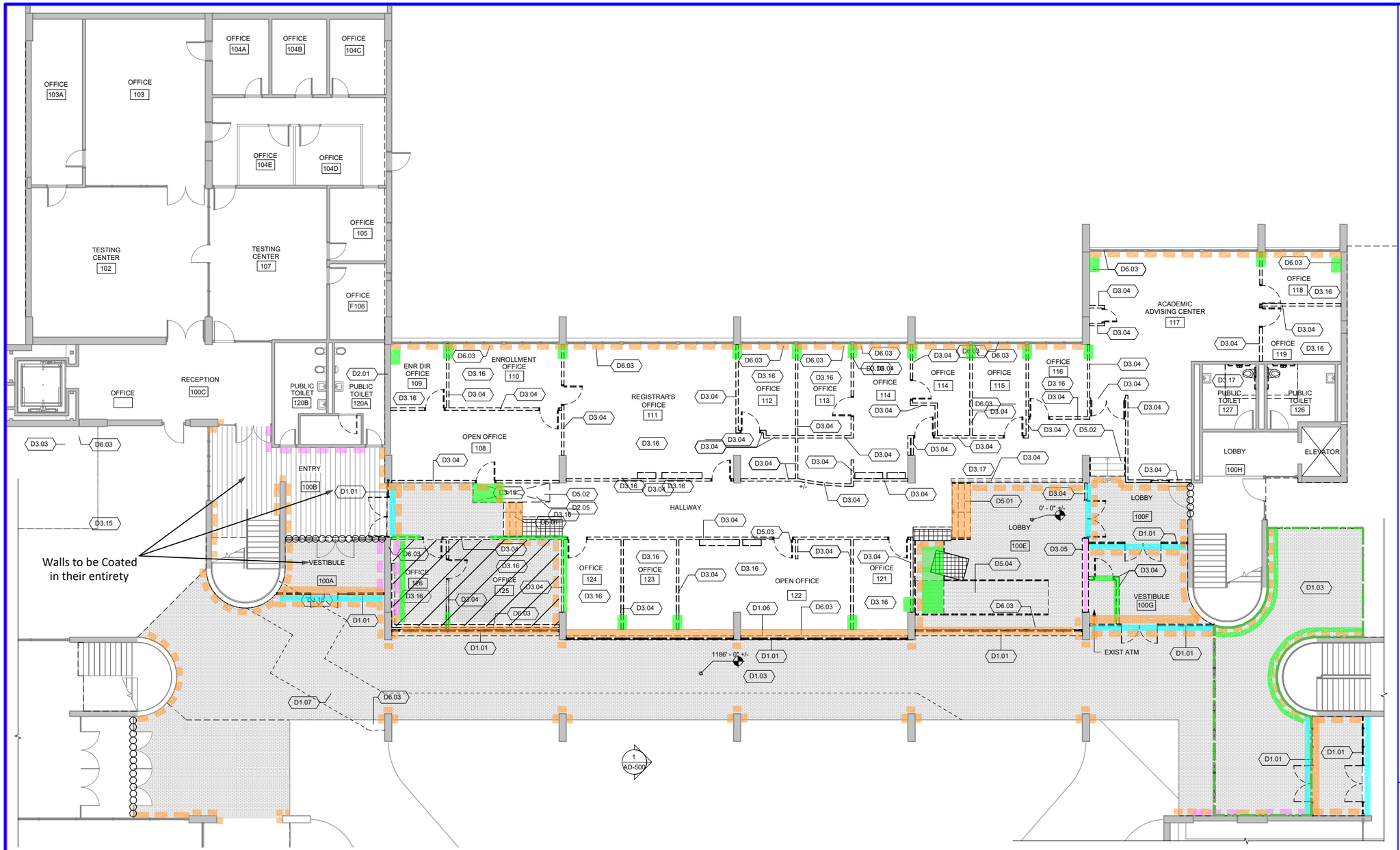
DRAWING TITLE:

Ground Floor- Caulk Sample Location and Abatement Plan

ATC
10 State Street, Suite 100
Woburn, Massachusetts 01801
(781) 932-9400
(781) 932-6211 FAX

DRAWN BY:	BAM
CHECKED BY:	DPW
PROJECT NO.	183DW20008
DATE:	June 2, 2020

FIGURE NO. **3a**



Notes:

1) All masonry (CMU/Concrete) remaining to be coated to 1 foot from the nearest caulk joint, except where noted.

0 Approximate Feet 20

N W E S

Legend

PCB-Contaminated Building Materials to be Removed:

- Concrete
- Concrete Masonry Unit (CMU) Walls
- Door Frames/Storefront
- Miscellaneous Wood and Drywall
- Pavers
- Carpet and Underlayment

PCB-Contaminated Building Materials to be Coated:

- Concrete (Columns, Walls, and/or Ceilings)
- CMU Walls

PCB-Contaminated Building Materials to be Cleaned:

- Non-porous Metal/Glass

PCB-Contaminated Building Materials to be covered with Rubberized Flooring:

- Brick Pavers (Entry 100B)

General Notes:

Base map from "Ground Floor Demo Plan", prepared by Dietz & Company Architects Inc. of Springfield, MA, dated 10/18/2019 .

NAME/ADDRESS:

Berkshire Community College
Field Administration Center
1350 West Street
Pittsfield, MA 01201

DRAWING TITLE:

Ground Floor- Substrate Building Material Abatement

ATC
10 State Street, Suite 100
Woburn, Massachusetts 01801
(781) 932-9400
(781) 932-6211 FAX

DRAWN BY:	BAM
CHECKED BY:	DPW
PROJECT NO.	183DW20008
DATE:	June 5, 2020

FIGURE NO. **3b**

BCC-02

67

COMPUTER CSRM

K210

D3.03

D3.24

BCC-07

18

D3.14

D3.04

LOBBY

K210M

D3.08

D3.12

D2.03

D3.15

REMOVE FLR FINISH IN DASHED AREA

WALL/CEILING INTERSECTION IN BATHROOM, 1st FLOOR KOUSSEVITZKY, BELOW THIS LOCATION

LOBBY

K210M

LECTURE RM

K210A

BCC-01

15.6

N

W E

S

0 Approximate Feet 10

Legend

Door Caulk Sample Location

ABC-123 — Caulk Sample ID

1,234 — Total PCB Concentration (parts per million)

PCB-Contaminated Building Materials to be Removed:

- Door Frame Caulk
- Concrete Masonry Unit (CMU) Walls
- Door Frames/Storefront
- Miscellaneous Wood and Drywall

PCB-Contaminated Building Materials to be Coated:

- Concrete (Columns, walls, and ceiling)

General Notes:

Base map from "Second Floor Demo Plan", prepared by Dietz & Company Architects Inc. of Springfield, MA, dated 10/18/2019 .

NAME/ADDRESS:

Berkshire Community College
Field Administration Center
1350 West Street
Pittsfield, MA 01201

DRAWING TITLE:

Second Floor - Caulk Sample Location and Abatement Plan

ATC
10 State Street, Suite 100
Woburn, Massachusetts 01801
(781) 932-9400
(781) 932-6211 FAX

DRAWN BY:	BAM
CHECKED BY:	DPW
PROJECT NO.	183DW20008
DATE:	June 2, 2020

FIGURE NO.

4a