

Inspector: Gareth H.

Date: 9/6/2018

 Job Name:
 Crompton and Knowles

 Job Number:
 71187168

 Area:
 Building 13

Sample No.	Color	Substrate	Component	Sample Location	Condition	XRF (mg/cm ²⁾	Lab Results (mg/cm ²⁾
13-L1	White	CMU Block	Wall	Exterior on North Side	М	N/A	< 0.0044%
13-L2	Red	Metal	Door	Exterior At Bay Door Entrance	Т	N/A	< 0.0054%
13-L3	Red	Metal	Door Frame	Exterior At Bay Door Entrance	Т	N/A	< 0.0052%
13-L4	Grey	Metal	Door	Interior At Bay Door Entrance	Т	N/A	< 0.0062%
13-L5	Grey	Metal	Door Frame	Interior At Bay Door Entrance	Т	N/A	< 0.0075%
13-L6	Red	Metal	Support Beam	Exterior Structure	Т	N/A	< 0.0059%
13-L7	Grey	Fiberglass	Door	Exterior Near Red Metal Structure	I	N/A	< 0.0045%
13-L8	Grey	Fiberglass	Door Frame	Exterior Near Red Metal Structure	I	N/A	< 0.0053%
13-L9	Grey	Fiberglass	Door	Interior Near Red Metal Structure	I	N/A	< 0.0078%
13-L10	Grey	Fiberglass	Door Frame	Interior Near Red Metal Structure	I	N/A	< 0.0062%
13-L11	Grey	Wood	Wall	Interior Parts Storage Room	Т	N/A	< 0.0058%
13-L12	Grey	Metal	Drill Press	Interior in Garage Bay Area	Т	N/A	0.086%
13-L13	Grey	Wood	Shelf	Interior Parts Storage Room	Т	N/A	0.22%



 Inspector:
 Gareth H.
 Job Name:
 Crompton and Knowles

 Date:
 9/7/2018
 Job Number:
 71187168

 Area:
 Building 14

Sample No.	Color	Substrate	Component	Sample Location	Condition	XRF (mg/cm ²⁾	Lab Results (mg/cm ²⁾
14-L1	Red	Metal	Door Frame	Door Frame at Bottom of Stairs	М	N/A	< 0.0059%
14-L2	Red	Metal	Structural Beam	Beam Laying on ground	M	N/A	0.28%



 Inspector:
 Gareth H.
 Job Name:
 Crompton and Knowles

 Date:
 8/17/2018
 Job Number:
 71187168

 Area:
 Building 15

Sample No.	Color	Substrate	Component	Sample Location	Condition	XRF (mg/cm ²⁾	Lab Results (mg/cm ²⁾
15-L1	White	CMU Block	Wall	North Exterior	Т	-0.1	0.23%
15-L2	Grey	Metal	Door	East	Т	0.1	0.060%
15-L3	Grey	Metal	Door Frame	East	Т	-0.2	< 0.0071%
15-L4	Grey	Metal	Window	South Exterior	S	-0.2	0.12%
15-L5	Grey	CMU Block	Wall	North Interior	Т	-0.1	0.18%
15-L6	White	CMU Block	Wall	North Interior	Т	-0.4	0.11%
15-L7	Red	CMU Block	Wall	East Interior	Т	-0.4	0.074%
15-L8	White	Concrete	Window Sill	North Interior	М	-0.2	0.20%
				POST CALIBRATION 1	N/A	1.0	N/A
_				POST CALIBRATION 2	N/A	1.0	N/A
				POST CALIBRATION 3	N/A	1.2	N/A



Inspector: Gareth H.
Date: 9/6/2018

 Job Name:
 Crompton and Knowles

 Job Number:
 71187168

 Area:
 Building 17

Sample No.	Color	Substrate	Component	Sample Location	Condition	XRF (mg/cm ²⁾	Lab Results (mg/cm ²⁾
17-L1	Tan	CMU Block	Wall	Exterior on West Side	S	N/A	< 0.0053%
17-L2	Red	Metal	Door	Exterior on North Side	Т	N/A	< 0.0045%
17-L3	Red	Metal	Door Frame	Exterior on North Side	Т	N/A	< 0.0057%
17-L4	Red	Metal	Door	Interior Bathroom	Т	N/A	< 0.0053%
17-L5	Red	Metal	Door Frame	Interior Bathroom	Т	N/A	< 0.0048%
17-L6	White	CMU Block	Wall	Interior	S	N/A	< 0.0047%
17-L7	Tan	Wood	Siding	Exterior	S	N/A	< 0.0061%
17-L8	Tan	Plywood	Siding	Exterior	S	N/A	< 0.0068%
17-L9	Tan	Metal	Bay Door Frame	Exterior at Bay Door Frame	Т	N/A	0.064%
17-L10	White	Wood	Wall	Interior Between Bay and Office	S	N/A	< 0.0050%
17-L11	Grey	Metal	Bay Door	Exterior at Bay Door	1	N/A	0.0059%
17-L12	Tan	Concrete	Wall	Exterior of Pump House Behind Building 17	Т	N/A	< 0.0055%
17-L13	Tan	CMU Block	Wall	Exterior of Pump House Behind Building 17	Т	N/A	< 0.0065%
17-L14	Tan	CMU Block	Wall	Interior of Pump House Behind Building 17	Т	N/A	< 0.0059%
17-L15	Grey	Metal	Framing	Interior of Pump House Behind Building 17	М	N/A	0.077%



 Inspector:
 Gareth H.
 Job Name:
 Crompton and Knowles

 Date:
 9/7/2018
 Job Number:
 71187168

 Area:
 Building 18

Sample No.	Color	Substrate	Component	Sample Location	Condition	XRF (mg/cm ²⁾	Lab Results (mg/cm ²⁾
18-L1	White	CMU Block	Wall	Exterior Near Bay Door Entrance	T	N/A	< 0.0060%
18-L2	Orange	Metal	Garage Door Frame	Exterior at Bay Door	М	N/A	10.%
18-L3	Grey	Metal	Door	Back Entrance Door Interior	T	N/A	< 0.0060%
18-L4	Grey	Metal	Door Frame	Back Entrance Door Interior	Т	N/A	< 0.0051%
18-L5	Grey	Metal	Door	Back Entrance Door Exterior	T	N/A	< 0.0074%
18-L6	Grey	Metal	Door Frame	Back Entrance Door Exterior	T	N/A	< 0.0065%
18-L7	Blue	Metal	Drum/Container	Exterior Near Bay Door Entrance	Т	N/A	< 0.0068%



Inspector: Gareth H.

Date: 9/6/2018

Job Name:	Crompton and Knowles
Job Number:	71187168
Area:	Building 21

Sample No.	Color	Substrate	Component	Sample Location	Condition	XRF (mg/cm ²⁾	Lab Results (mg/cm ²⁾
21-L1	White	CMU Block	Wall	Exterior	T	N/A	< 0.0048%
21-L2	White	Metal	Garage Door	Exterior	М	N/A	0.033%
21-L3	White	Metal	Gutter	Exterior	I	N/A	< 0.0065%
21-L4	Grey	Metal	Door	Interior	Т	N/A	0.027%
21-L5	Grey	Metal	Door Frame	Interior	Т	N/A	< 0.0060%
21-L6	White	Metal	Door	Exterior	T	N/A	0.015%
21-L7	White	Metal	Door Frame	Exterior	T	N/A	< 0.0058%



Inspector: Russell Harrings
Date: 7/23/2018

Job Name:	Crompton and Knowles
Job Number:	71187168
Area:	Building 22

Sample No.	Color	Substrate	Component	Sample Location	Condition	XRF (mg/cm ²⁾	Lab Results (mg/cm ²⁾
22L-1	Tan	Wood	Wall	22 North	I	N/A	< 0.0046%
22L-2	Tan	Wood	Door	22 North	I	N/A	< 0.0047%
22L-3	Yellow	Metal	Rail	22 North West of Building	Т	N/A	< 0.0041%
22L-4	Yellow	Metal	Rail	Pit South West	S	N/A	0.65%
22L-5	Black	Metal	Walkway	Pit South West	S	N/A	< 0.0069%



Inspector: Russell Harrings
Date: 7/24/2018

Job Name:	Crompton and Knowles
Job Number:	71187168
Area:	Building 24

Sample No.	Color	Substrate	Component	Sample Location	Condition	XRF (mg/cm ²⁾	Lab Results (mg/cm ²⁾
L-1	Red	Metal	Column	West Corner	S	N/A	0.16%



 Inspector:
 Gareth H.
 Job Name:
 Crompton and Knowles

 Date:
 8/20/2018
 Job Number:
 71187168

 Area:
 Building 26

Sample No.	Color	Substrate	Component	Sample Location	Condition	XRF (mg/cm ²⁾	Lab Results (mg/cm ²⁾
26-L1	Red	Metal	Structural Beam	West End of Structure		-0.2	< 0.0062%
26-L2	White	Metal	Structural Beam	East End of Structure		-0.2	< 0.0065%
				POST CALIBRATION 1	N/A	0.9	N/A
				POST CALIBRATION 2	N/A	1.2	N/A
				POST CALIBRATION 3	N/A	1.1	N/A



Inspector: Gareth H.
Date: 9/7/2018

Job Name: Crompton and Knowles

Job Number: 71187168

Area: Building 28

Sample No.	Color	Substrate	Component	Sample Location	Condition	XRF (mg/cm ²⁾	Lab Results (mg/cm ²⁾
28-L1	White	CMU Block	Wall	Exterior on South Side	I	N/A	< 0.0057%
28-L2	Red	Metal	Door	Exterior on Southeast Entrance	Т	N/A	< 0.0080%
28-L3	Green	CMU Block	Wall	Inteior Near Northeast Door	I	N/A	< 0.0050%
28-L4	White	CMU Block	Wall	Interior of Middle Room	I	N/A	< 0.0066%
28-L5	Brown	Metal	Door	Interior of East Door	Т	N/A	< 0.0070%
28-L6	Red	Metal	Door Frame	Exterior on Southeast Entrance	Т	N/A	< 0.0060%
28-L7	White	Wood	Siding	Exterior on Overhang	М	N/A	< 0.0048%
28-L8	Red	Metal	Door	Interior on Southeast Entrance	I	N/A	< 0.0043%
28-L9	Brown	Metal	Door Frame	Interior of East Door	I	N/A	< 0.0051%
28-L10	Grey	Metal	Paneling	Interior Electrical Room	I	N/A	< 0.0063%
28-L11	White	Metal	Support Beam	Conduit Rack on Exterior	I	N/A	< 0.0051%



Inspector: Gareth H.
Date: 9/7/2018

Job Name: Crompton and Knowles

Job Number: 71187168

Area: Building 29

Sample No.	Color	Substrate	Component	Sample Location	Condition	XRF (mg/cm ²⁾	Lab Results (mg/cm ²⁾
29-L1	Red	Metal	Wall	Metal Structure Next to 29	I	N/A	< 0.0069%
29-L2	Yellow	Metal	Railing	Metal Structure Next to 29	I	N/A	< 0.0042%
29-L3	White	CMU Block	Wall	Exterior on West Side	I	N/A	< 0.0062%
29-L4	White	Metal	Support Beam	Conduit Rack on Exterior	I	N/A	< 0.0073%
29-L5	Red	Metal	Structural Beam	Metal Structure Next to 29	I	N/A	< 0.0056%
29-L6	Red	Metal	Door	Exterior	I	N/A	< 0.0051%
29-L7	Red	Metal	Door	Interior	I	N/A	< 0.0045%
29-L8	Red	Metal	Door Frame	Exterior	I	N/A	< 0.0061%
29-L9	Red	Metal	Door Frame	Interior	I	N/A	< 0.0056%
29-L10	White	Metal	Top Ledge of Wall	Metal Structure Next to 29	I	N/A	< 0.0048%
29-L11	Red	Metal	Ladder	Metal Structure Next to 29	I	N/A	< 0.0067%
29-L12	Blue	Metal	Pump Housing	Metal Structure Next to 29	I	N/A	0.042%
29-L13	Black	Metal	Pipe	Inside of Building 29	I	N/A	< 0.0055%
29-L14	Blue	Metal	Base Foundation	Inside of Building 29	ı	N/A	< 0.0063%
29-L15	White	Metal	Gutter	Exterior on South Side	I	N/A	< 0.0058%



Inspector: Gareth H.

Date: 9/7/2018

 Job Name:
 Crompton and Knowles

 Job Number:
 71187168

 Area:
 Building 30

Sample No.	Color	Substrate	Component	Sample Location	Condition	XRF (mg/cm ²⁾	Lab Results (mg/cm ²⁾
30-L1	White	CMU Block	Wall	Exterior	Т	N/A	< 0.0054%
30-L2	Orange	Metal	Door	Exterior Double Doors	I	N/A	< 0.0066%
30-L3	Orange	Metal	Door Frame	Exterior Double Doors	I	N/A	0.62%
30-L4	Orange	Metal	Door	Interior Double Doors	I	N/A	< 0.0040%
30-L5	Orange	Metal	Door Frame	Interior Double Doors	I	N/A	0.38%
30-L6	Grey	Metal	Paneling	Interior	I	N/A	< 0.0078%
30-L7	Green	Metal	Transformer	Exterior Next to Building 30	Т	N/A	0.50%
30-L8	White/Yellow	Metal	Meter Box	Exterior Attached to Wall At Front Entrance	I	N/A	0.62%



Inspector: Gareth H.

Date: 9/7/2018

Job Name:	Crompton and Knowles
Job Number:	71187168
Area:	Building 31

Sample No.	Color	Substrate	Component	Sample Location	Condition	XRF (mg/cm ²⁾	Lab Results (mg/cm ²⁾
31-L1	Red	Metal	Exterior Door	Southwest Door	T	N/A	< 0.0059%
31-L2	Red	Metal	Exterior Door Frame	Southeast Door	Т	N/A	0.83%
31-L3	White	СМИ	Exterior Wall	Northeast Wall	I	N/A	< 0.0063%
31-L4	White	Metal	Steps	Lower Steps	М	N/A	< 0.0069%
31-L5	White	Metal	Tank Wall	Ground Level	М	N/A	< 0.0069%



Inspector: Gareth H.

Date: 9/7/2018

Job Name:	Crompton and Knowles
Job Number:	71187168
Area:	Building 34

Sample No.	Color	Substrate	Component	Sample Location	Condition	XRF (mg/cm ²⁾	Lab Results (mg/cm ²⁾
34-L1	Yellow	Metal	Ladder	Retaining Pool Attached to Building 34	М	N/A	< 0.0065%
34-L2	White/Yellow	Metal	Beam	Retaining Pool Attached to Building 34	М	N/A	6.7%
34-L3	White	CMU Block	Wall	Exterior Wall	М	N/A	< 0.0051%
34-L4	Yellow	Metal	Garage Door Frame	Exterior at Garage Door	I	N/A	< 0.0046%
34-L5	Green	Metal	Garage Door	Exterior at Garage Door	I	N/A	< 0.0055%
34-L6	Blue	Metal	Electrical Box	Interior on Wall		N/A	< 0.0055%
34-L7	Blue	Metal	Pump Housing	Interior on Ground	I	N/A	< 0.0074%
34-L8	Green	Metal	Cabinet	Interior Near Garage Door	I	N/A	< 0.0050%
34-L9	Blue/Red	Metal	Pump	Associated with Building 34, Found Outside	I	N/A	0.0075%



 Inspector:
 Russell Harrings
 Job Name:
 Crompton and Knowles

 Date:
 7/23/2018
 Job Number:
 71187168

 Area:
 T103A

Sample No.	Color	Substrate	Component	Sample Location	Condition	XRF (mg/cm ²⁾	Lab Results (mg/cm ²⁾
T103A-L1	Grey	Metal	Steps	T-103A Lower	S	N/A	<0.0065 %
T103A-L2	Grey	Metal	Access	North Side Ground	I	N/A	<0.0049 %
T103A-L3	White	Metal	Anchor Bolt	East Side	I	N/A	<0.0066 %
T103A-L4	White	Metal	Outer Wall	East Side	Т	N/A	<0.0063 %
T103A-L5	Yellow	Metal	Stairs	Southwest Side	S	N/A	<0.0062 %



 Inspector:
 Gareth H.
 Job Name:
 Crompton and Knowles

 Date:
 9/7/2018
 Job Number:
 71187168

 Area:
 Tank 103B

Sample No.	Color	Substrate	Component	Sample Location	Condition	XRF (mg/cm ²⁾	Lab Results (mg/cm ²⁾
T103B-L1	White	Metal	Handrail	Stairs to top of Tank	S	N/A	<0.0063 %
T103B-L2	White	Metal	Support Beam	Associated with Stairs	S	N/A	<0.0070 %
T103B-L3	White	Metal	Stair	At bottom of Steps	S	N/A	<0.0047 %
T103B-L4	White	Metal	Hatch Cover	Base of Tank	I	N/A	<0.0060 %
T103B-L5	White	Metal	Small Tank	Suspended Tank Between 105 and 111	I	N/A	<0.0067 %



 Inspector:
 Gareth H.
 Job Name:
 Crompton and Knowles

 Date:
 9/7/2018
 Job Number:
 71187168

 Area:
 Tank 105

Sample No.	Color	Substrate	Component	Sample Location	Condition	XRF (mg/cm ²⁾	Lab Results (mg/cm ²⁾
T105-L1	White	Metal	Handrail	Stairs to Top of Tank	S	N/A	<0.0051 %
T105-L2	White	Metal	Support Beam	Associated with Stairs	S	N/A	<0.0054 %
T105-L3	White	Metal	Stair	At bottom of Steps	S	N/A	<0.0079 %
T105-L4	White	Metal	Hatch Cover	Base of Tank	1	N/A	<0.0053 %
T105-L5	White	Metal	Small Tank	Suspended Tank Between 105 and 111	I	N/A	<0.0065 %
T105-L6	White	Metal	Pipe System Support	Between Tanks	М	N/A	<0.0060 %
T105-L7	Blue	Metal	Small Motor	Top of Stairs	1	N/A	<0.0072 %
T105-L8	Blue	Metal	Large Motor	Center of Tank	- 1	N/A	<0.0045 %
T105-L9	White	Metal	Walkway	Top of Tank	М	N/A	<0.0078 %
T105-L10	White	Metal	Ladder	Attached to Side of Tank	S	N/A	<0.0054 %



 Inspector:
 Gareth H.
 Job Name:
 Crompton and Knowles

 Date:
 9/7/2018
 Job Number:
 71187168

 Area:
 Tank 111

Sample No.	Color	Substrate	Component	Sample Location	Condition	XRF (mg/cm ²⁾	Lab Results (mg/cm ²⁾
T111-L1	White	Metal	Stairs	Steps to top of Tank 111	S	N/A	<0.0079 %
T111-L2	White	Metal	Handrail	On Steps of Tank 111	S	N/A	<0.0055 %
T111-L3	White	Metal	Support Beam	On Elevated Pipe Rack	S	N/A	<0.0049 %
T111-L4	White	Metal	Tank Wall	Exterior of Tank 111	- 1	N/A	<0.0057 %
T111-L5	White	Metal	Walkway	At Top of Tank 111	М	N/A	<0.0060 %
T111-L6	White	Metal	Tank Wall	Interior of Wall on Tank 111	!	N/A	<0.0058 %

lerracon

Lead Paint Survey Form

 Inspector:
 Russell Harrings
 Job Name:
 Crompton and Knowles

 Date:
 7/24/2018
 Job Number:
 71187168

 Area:
 Exterior Pipe System

Sample No.	Color	Substrate	Component	Sample Location	Condition	XRF (mg/cm ²⁾	Lab Results (mg/cm ²⁾
EPL-1	White	Metal	Support Column	Northwest	S	N/A	<0.0054 %

APPENDIX E

Mid-Atlantic's Environmental Management Plan – Demolition Activities (Revision 1)





1125 E. Morehead Street, Suite 104

Charlotte, NC 28204-2849 Office: 980. 585.1271 Facsimile: 980. 585.1272

MAAONLINE.COM

September 13, 2022

Ms. Joselyn Harriger North Carolina Department of Environmental Quality Division of Waste Management, Brownfields Program Mail Service Center 1646 Raleigh, North Carolina 27699-1646

Subject: Environmental Management Plan – Demolition Activities (Revision 1)

Yorkshire Americas III

1602 North Main Street, Lowell, North Carolina

Mid-Atlantic Project #000H1336.00 Brownfields Project #25089-21-036

Dear Ms. Harriger:

On behalf of the City of Lowell (the Prospective Developer), Mid-Atlantic Associates, Inc. submits the attached *Environmental Management Plan – Demolition Activities (Revision 1)* for the above-referenced property for demolition specific activities proposed. A revised *Environmental Management Plan* incorporating NCDEQ comments for remaining redevelopment activities will be submitted following demolition activities.

If you have any questions concerning this submittal, please do not hesitate to call us at (980) 585-1271.

With best regards,

MID-ATLANTIC ASSOCIATES, INC.

SEAL 2437 OSOLOGIS SHANE

Shane Sisco, P.G. Project Hydrogeologist Greg D. Icenhour, P.G., MBA Principal Geologist

EXPERIENCED CUSTOMER FOCUSED INNOVATIVE



Experienced. Customer Focused. Innovative.

REPORT DATE: September 13, 2022

MID-ATLANTIC PROJECT NO: 000H1336.00 BROWNFIELDS PROJECT NO: 25089-21-036

Environmental Management Plan – Demolition Activities (Revision 1)

Yorkshire Americas III
1602 North Main Street, Lowell, Gaston County, North Carolina

ENGINEERING & ENVIRONMENTAL SOLUTIONS

PREPARED FOR:

NCDEQ Brownfields Program

Attn: Jordan Thompson Mail Service Center 1646 Raleigh, North Carolina 27699

PREPARED BY:

Mid-Atlantic Associates, Inc. 1125 E. Morehead Street, Suite 104 Charlotte, North Carolina 28204 (980) 585-1271 | MAAONLINE.COM

TABLE OF CONTENTS

NCDEQ EMP Form

FIGURES

Drawing 1 Topographic Site Map

Drawing 2 Site Map

Drawing 3 Proposed Sample Location Map

APPENDICES

Appendix A Previous Assessment Tables (Geosyntec)

Appendix B Previous Assessment Figures (Geosyntec)

Appendix C Terracon's Hazardous Materials Survey Report

Appendix D Mid-Atlantic's Hazard Characteristic Determination for Beneficial Reuse

Assessment Report



NORTH CAROLINA BROWNFIELDS PROGRAM ENVIRONMENTAL MANAGEMENT PLAN

This form is to be used to prepare an Environmental Management Plan (EMP) for projects in the North Carolina Brownfields Program at the direction of a Brownfields project manager.

The EMP is a typical requirement of a Brownfields Agreement (BFA). Its purpose is to clarify actions to be taken during the demolition and construction at Brownfields properties in an effort to avoid delays in the event of the discovery of new contamination sources or other environmental conditions. The EMP provides a means to document redevelopment plans and environmental data for each applicable environmental medium to inform regulatory-compliant decision-making at the site. As much detail as possible should be included in the EMP, including contingency planning for unknowns. Consult your project manager if you have questions.

Prospective Developers and/or their consultants must complete and submit this form and all pertinent attachments, see checklist below, to their Brownfields project manager prior to any earthmoving or other development-related activities that have the potential to disturb soil at the Brownfields Property, including demolition. For the resultant EMP to be valid for use, it must be completed, reviewed by the program, signed by all parties working on the project, and approved by the Brownfields project manager. Failure to comply with the requirements of the EMP could jeopardize project eligibility, or in the event of a completed agreement, be cause for a reopener

So that the EMP provides value in protecting brownfields eligibility and public health, the preparer shall ensure that the following steps have been completed prior to submitting the EMP for review. Any EMP prepared without completing these steps is premature.

Site sampling and assessment that meets Brownfields' objectives is complete and has been reviewed and approved by the Brownfields Project Manager.
Specific redevelopment plans, even if conceptual, have been developed for the project submitted and reviewed by the Brownfields Project Manager.

and applicable to the proposed redevelopment: ☑ A set of redevelopment plans, including architectural/engineering plans, if available; if not conceptual plans may suffice if updated when detailed plans are drafted. ☐ A figure overlaying redevelopment plans on a map of the extent of contamination for each media. ☐ Site grading plans that include a cut and fill analysis. ☐ A figure showing the proposed location and depth of impacted soil that would remain on site after construction grading. Any necessary permits for redevelopment (i.e. demolition, etc.). ☐ A detailed construction schedule that includes timing and phases of construction. ☐ Tabulated data summaries for each impacted media (i.e. soil, groundwater, soil gas, etc.) applicable to the proposed redevelopment. ☐ Figures with the sampling locations and contamination extents for each impacted media applicable to the proposed redevelopment. ☑ A full final grade sampling and analysis plan, if the redevelopment plan is final. ☐ If known, information about each proposed potential borrow soil source, such as aerial photos, historic site maps, historic Sanborn maps, a site history, necessary for brownfields approval. ☐ Information and, analytical data if required, for quarries, or other borrow sources, detailing the type of material proposed for importation to the Brownfields Property. ☐ A work plan for the sampling and analysis of soil to be brought onto the Brownfields Property. Refer to Issue Resolution 15 in Brownfields Program Guidelines. ☐ A map of the Brownfields Property showing the location of soils proposed for export and sampling data from those areas. ☐ If a Vapor Mitigation System is required by the Brownfields Program, the Vapor Intrusion Mitigation System (VIMS) plan will be signed and sealed by a NC Professional

Please submit, along with the completed EMP form, the following attachments, as relevant

Engineer. The VIMS Plan may also be submitted under separate cover.

GENERAL INFORMATION

Date: 9/13/2022 **Revision Date (if applicable):** Click or tap to enter a date.

Brownfields Assigned Project Name: Yorkshire Americas III

Brownfields Project Number: 25089-21-036

Brownfields Property Address: 1602 North Main Street

Brownfields Property Area (acres): The site includes one parcel (Parcel ID Number 127479) totaling approximately 17.09-acres of land. A topographic site location map is provided as **Drawing 1** and the site and surrounding area are shown in **Drawing 2**.

Is Brownfields Property Subject to RCRA Permit?..... \square Yes \square No

If yes enter Permit No.: Click or tap here to enter text.

Is Brownfields Property Subject to a Solid Waste Permit..........□ Yes ⊠ No

If yes, enter Permit No.: Click or tap here to enter text.

COMMUNICATIONS

A copy of this EMP shall be distributed to all the parties below as well as any contractors or site workers that may be exposed to site vapors, soil, groundwater, and/or surface water. Additionally, a copy of the EMP shall be maintained at the Brownfields Property during redevelopment activities. NOTE, THE EMP DOES NOT TAKE THE PLACE OF A SITE-SPECIFIC HEALTH AND SAFETY PLAN.

Prospective Developer (PD): The City of Lowell

Contact Person: Scott Attaway / City Manager

Phone Numbers: Office: (704) 824-3518 Mobile: (704) 860-1660

Email: sattaway@lowellnc.com

Contractor for PD: Click or tap here to enter text.

Contact Person: Click or tap here to enter text.

Phone Numbers: Office: Click or tap here to enter text. **Mobile:** Click or tap here to enter text.

Email: Click or tap here to enter text.

Environmental Consultant: Mid-Atlantic Associates, Inc.

Contact Person: Shane Sisco, P.G.

Phone Numbers: Office: (980) 585-1271 Mobile: (757) 681-0192

Email: ssisco@maaonline.com

Brownfields Program Project Manager: Joselyn Harriger

Phone Numbers: Office: (704) 235-2195 Mobile: (980) 297-4623

Email: joselyn.harriger@ncdenr.gov

Other DEQ Program Contacts (if applicable, i.e., UST Section, Inactive Hazardous Site Branch, Hazardous Waste, Solid Waste):

UST Section (UST Incident #27251)

Hazardous Waste / Brownfields (Facility ID #17056-13-036)

Hazardous Waste / Federal Remediation Branch (Facility ID #NCD04444735)

Hazardous Waste / Brownfields (Facility ID #10036-06-036)

NOTIFICATIONS TO THE BROWNFIELDS PROGRAM

Written advance Notification Times to Brownfields Project Manager: minimum advance notice periods (in calendar days) for each type of o		accept
On-site assessment or remedial activities:	10 days Prior	
Construction or grading start:	10 days Prior	
Discovery of stained soil, odors, USTs, buried drums or waste, landfill, unknown contamination:		•
Implementation of emergency actions (e.g. dewatering, flood or soil e area of contamination, ventilation of work zones):		
Installation of mitigation systems:	10 days Prior	
Other notifications as required by local, state or federal agencies to in activities: (as applicable):	•	opment
REDEVELOPMENT PLANS		
1) Type of Redevelopment (check all that apply): □Residential ☑Recreational □Institutional □Commercial □ ☑Other specify: As described herein, this EMP is intended to address demolition a updated EMP will be provided to the NCDEQ Brownfields Project □ approval prior to the commencement of post-demolition redevelopment property for use as a municipal park.	ctivities only. A rev Manager for reviev	rised and v and
 Check the following activities that will be conducted prior to come at the site: ☑ Review of historic maps (Sanborn Maps, facility maps) ☑ Conducting geophysical surveys to evaluate the location of sus 	-	-

detailed plans are not available. EMP review without such information would be Provide brief summary of redevelopment plans, including demolition, removal of slabs/pavement, grading plans and planned construction of new structures: As described herein, this EMP is intended to address demolition activities only. A revised and updated EMP will be provided to the NCDEQ Brownfields Project Note review and approval prior to the commencement of post-demolition redevelopment on the site has included twent industrial structures, several aboveground storage tanks (ASTs), five waste wate tanks, and three aeration lagoons as part of industrial textile manufacturing ope Redevelopment plans include the demolition of the majority of existing structure grading/development of a public works building, parking area, landscaped munic amphitheater, and outdoor recreational facilities (i.e., shelters, restrooms, sport The existing mill building, sludge tower, western warehouse, and portion of the shipping/receiving dock will be repurposed as a banquet hall, observation tower structure, and an entertainment stage, respectively. Building slabs from demolished structures are currently proposed to be crushed demolition activities and disposed of off-site at an NCDEQ-approved facility. Furtibuilding materials surveys conducted for proper off-site disposal are described be 1.C and provided in Appendix C and Appendix D. 4) Do plans include demolition of structure(s)?: Yes		lines, etc. ☐ Interviews with employees/former employees/facility managers/neighbors
A revised and updated EMP will be provided to the NCDEQ Brownfields Project Nerview and approval prior to the commencement of post-demolition redevelops Brownfields property. The site is situated on approximately 17 acres of land in a mixed residential and of Lowell, North Carolina. Historical development on the site has included twent industrial structures, several aboveground storage tanks (ASTs), five waste wate tanks, and three aeration lagoons as part of industrial textile manufacturing ope Redevelopment plans include the demolition of the majority of existing structure grading/development of a public works building, parking area, landscaped munic amphitheater, and outdoor recreational facilities (i.e., shelters, restrooms, sport The existing mill building, sludge tower, western warehouse, and portion of the shipping/receiving dock will be repurposed as a banquet hall, observation tower structure, and an entertainment stage, respectively. Building slabs from demolished structures are currently proposed to be crushed demolition activities and disposed of off-site at an NCDEQ-approved facility. Furth building materials surveys conducted for proper off-site disposal are described by 1.C and provided in Appendix C and Appendix D. 4) Do plans include demolition of structure(s)?: Yes No Unknown Helenth of the North Carolina Department of Health and Human Services. If availade provide a copy of your demolition permit. Are sediment and erosion control measures required by federal, state, or local recomplicable legal requirements. If soil disturbance is necessary to install sedim	3)	Summary of Redevelopment Plans (MANDATORY: attach detailed plans or conceptual plans, if detailed plans are not available. EMP review without such information would be premature): Provide brief summary of redevelopment plans, including demolition, removal of building slabs/pavement, grading plans and planned construction of new structures:
review and approval prior to the commencement of post-demolition redevelops Brownfields property. The site is situated on approximately 17 acres of land in a mixed residential and of Lowell, North Carolina. Historical development on the site has included twent industrial structures, several aboveground storage tanks (ASTs), five waste wate tanks, and three aeration lagoons as part of industrial textile manufacturing ope Redevelopment plans include the demolition of the majority of existing structure grading/development of a public works building, parking area, landscaped munic amphitheater, and outdoor recreational facilities (i.e., shelters, restrooms, sport The existing mill building, sludge tower, western warehouse, and portion of the shipping/receiving dock will be repurposed as a banquet hall, observation tower structure, and an entertainment stage, respectively. Building slabs from demolished structures are currently proposed to be crushed demolition activities and disposed of off-site at an NCDEQ-approved facility. Furthey building materials surveys conducted for proper off-site disposal are described be 1.C and provided in Appendix C and Appendix D. Do plans include demolition of structure(s)?: Yes No Unknown Lif yes, please check here to confirm that demolition will be conducted in accoapplicable legal requirements, including without limitation those related to lead a abatement that are administered by the Health Hazards Control Unit within the Department of the North Carolina Department of Health and Human Services. If availade provide a copy of your demolition permit. Are sediment and erosion control measures required by federal, state, or local reconapplicable legal requirements. If soil disturbance is necessary to install sedim		As described herein, this EMP is intended to address demolition activities only.
of Lowell, North Carolina. Historical development on the site has included twent industrial structures, several aboveground storage tanks (ASTs), five waste wate tanks, and three aeration lagoons as part of industrial textile manufacturing ope Redevelopment plans include the demolition of the majority of existing structure grading/development of a public works building, parking area, landscaped munic amphitheater, and outdoor recreational facilities (i.e., shelters, restrooms, sport The existing mill building, sludge tower, western warehouse, and portion of the shipping/receiving dock will be repurposed as a banquet hall, observation tower structure, and an entertainment stage, respectively. Building slabs from demolished structures are currently proposed to be crushed demolition activities and disposed of off-site at an NCDEQ-approved facility. Furth building materials surveys conducted for proper off-site disposal are described be 1.C and provided in Appendix C and Appendix D. Do plans include demolition of structure(s)?: Yes □ No □ Unknown If yes, please check here to confirm that demolition will be conducted in accoapplicable legal requirements, including without limitation those related to lead a abatement that are administered by the Health Hazards Control Unit within the DHealth of the North Carolina Department of Health and Human Services. If availade provide a copy of your demolition permit. Are sediment and erosion control measures required by federal, state, or local regions applicable legal requirements. If soil disturbance is necessary to install sedim		A revised and updated EMP will be provided to the NCDEQ Brownfields Project Manager for review and approval prior to the commencement of post-demolition redevelopment work at the Brownfields property.
demolition activities and disposed of off-site at an NCDEQ-approved facility. Furth building materials surveys conducted for proper off-site disposal are described by 1.C and provided in Appendix C and Appendix D. 4) Do plans include demolition of structure(s)?: ☐ Yes ☐ No ☐ Unknown ☐ If yes, please check here to confirm that demolition will be conducted in accordapplicable legal requirements, including without limitation those related to lead a abatement that are administered by the Health Hazards Control Unit within the DHealth of the North Carolina Department of Health and Human Services. If availate provide a copy of your demolition permit. 5) Are sediment and erosion control measures required by federal, state, or local regions of the North Carolina Department of Health and Human Services. If availate provide a copy of your demolition permit. 6) Are sediment and erosion control measures required by federal, state, or local regions of the North Carolina Department of Health and Human Services. If availate provide a copy of your demolition permit.		shipping/receiving dock will be repurposed as a banquet hall, observation tower, storage
 ✓ Yes □ No □ Unknown ☑ If yes, please check here to confirm that demolition will be conducted in accoapplicable legal requirements, including without limitation those related to lead a abatement that are administered by the Health Hazards Control Unit within the DHealth of the North Carolina Department of Health and Human Services. If availa provide a copy of your demolition permit. Are sediment and erosion control measures required by federal, state, or local region of the North Carolina Department of Health and Human Services. If availa provide a copy of your demolition permit. ✓ Yes □ No □ Unknown ☑ If yes, please check here to confirm that demolition will be conducted in accoapplicable legal requirements. If soil disturbance is necessary to install sedim 		Building slabs from demolished structures are currently proposed to be crushed on-site during demolition activities and disposed of off-site at an NCDEQ-approved facility. Further discussion of building materials surveys conducted for proper off-site disposal are described below in Section 1.C and provided in Appendix C and Appendix D .
 ✓ Yes □ No □ Unknown ☑ If yes, please check here to confirm that demolition will be conducted in accomplicable legal requirements. If soil disturbance is necessary to install sedim 	4)	Yes □ No □ Unknown ☐ If yes, please check here to confirm that demolition will be conducted in accordance with applicable legal requirements, including without limitation those related to lead and asbestos abatement that are administered by the Health Hazards Control Unit within the Division of Public Health of the North Carolina Department of Health and Human Services. If available, please
control measures, they may not begin until this EMP is approved.	5)	Are sediment and erosion control measures required by federal, state, or local regulations? ☑ Yes ☐ No ☐ Unknown ☑ If yes, please check here to confirm that demolition will be conducted in accordance with applicable legal requirements. If soil disturbance is necessary to install sediment and erosion control measures, they may not begin until this EMP is approved.

6) Which category of risk-based screening level is used or is anticipated to be specified in the

be	Brownfields Agreement? Note: If children frequent the property, residential screening levels shall be cited in the Brownfields Agreement for comparison purposes.	
X	Residential Non-Residential or Industrial/Commercial	
	Construction start date: Project organization for the planned demolition is currently underway, with The City of Lowell actively soliciting demolition bids from contractors. Once the contractor is chosen, contracted, and appropriate permits secured, actual demolition activities will be scheduled based on the contractor's proposed schedule. Currently, we anticipate mobilization to the site in the Fall of 2022. As described herein, this EMP is intended to address demolition activities only. A revised and updated EMP will be provided to the NCDEQ Brownfields Project Manager for review and approval prior to the commencement of post-demolition redevelopment work at the Brownfields property.	
b)	Anticipated duration (specify activities during each phase):	
	Phase I: Demolition of structures. Actual demolition duration will be verified by the demolition contractor once chosen. As of the date of this EMP, our best estimate is 60 days	
c)	Additional phases planned? Yes No If yes, specify the start date and/or activities if known:	
	Start Date: To be determined	
	Planned Activity:	
	Phase II: Post-demolition redevelopment. As described herein, this EMP is intended to address demolition activities only. A revised and updated EMP will be provided to the NCDEQ Brownfields Project Manager for review and approval prior to the commencement of post-demolition redevelopment work at the Brownfields property	
	Start Date: Click or tap to enter a date.	
	Planned Activity:	
	Click or tap here to enter text.	
	Start Date: Click or tap to enter a date.	
	Planned Activity:	
	Click or tap here to enter text.	
d)	Provide the planned date of occupancy for new buildings: Q2 2023	
	CONTAMINATED MEDIA	
	CONTAIMINATED MEDIA	
Par Par	t 1. Soil:	

1)

7)

Part 4. Sediment:	⊠ No	☐ Suspected
Part 5. Soil Vapor:	⊠ No	☐ Suspected
Part 6. Sub-Slab Soil Vapor: 🗆 Yes	⊠ No	☐ Suspected
Part 7. Indoor Air:	⊠ No	☐ Suspected

2) For the <u>Area of Proposed Redevelopment</u> on the Brownfields Property, attach tabulated data summaries for each impacted media and figure(s) with sample locations.

PART 1. Soil – Please fill out the information below, using detailed site plans, if available, or estimate using known areas of contaminated soil and a conceptual redevelopment plan. Provide a figure overlaying new construction onto figure showing contaminated soil and groundwater locations.

1) Known or suspected contaminants in soil (list general groups of contaminants):

A tabular summary of available soil sample analytical data in comparison to the North Carolina Department of Environmental Quality (NCDEQ) Underground Storage Tank (UST) Section Action Levels, the NCDEQ Inactive Hazardous Sites Branch (IHSB) Preliminary Soil Remediation Goals (PSRGs), and most recent versions of NCDEQ Vapor Intrusion Guidance is included as **Appendix A**. Sample location maps are provided as **Appendix B**. A brief summary of the soil assessment results is provided below.

Volatile Organic Compounds (VOCs)

Laboratory analytical results indicate that concentrations of the VOCs 1,2,3-trichlorobenzene and 1,2,4-trichlorobenzene were detected at concentrations exceeding the Residential and Industrial PSRGs in soil samples collected on the Brownfields property. Residential and Industrial PSRG exceedances for the VOC impacts are present near Buildings 8 and the former clarifier. No other VOCs were detected at concentrations exceeding the Residential PSRGs in soil samples collected on the Brownfields property.

Semi-Volatile Organic Compounds (SVOCs)

Laboratory analytical results indicate that concentrations of SVOCs were detected across the Brownfields property but were below Residential PSRGs.

Metals

Laboratory analytical results indicate that concentrations of the metals arsenic, total chromium, mercury, nickel, and thallium were detected at concentrations exceeding the Residential PSRGs in soil samples collected on the Brownfields property. Arsenic and total chromium impacts, which also exceed Industrial PSRGs, are present across the entire Brownfields property. Residential PSRG exceedances for the remaining metals are present near Buildings 1, 5, 9, 10, 11, 12, 18, 24, 33 and the former southeastern lagoon. No other metals were detected at concentrations exceeding the Residential PSRGs and/or naturally occurring background levels in soil samples collected on the Brownfields property.

Volatile Petroleum Hydrocarbons (VPH) and Extractable Petroleum Hydrocarbons (EPH)

Laboratory analytical results indicate that concentrations of the aliphatic carbon chain C9-C18 and aromatic carbon chain C11-C22 were detected at concentrations exceeding the Residential PSRGs in soil samples collected near the substation. No other VPH/EPH carbon chains were detected at concentrations exceeding the Residential PSRGs in soil samples collected on the Brownfields property.

Polychlorinated Biphenyls (PCBs)

Laboratory analytical results indicate that concentrations of PCBs were detected near the substation but were below Residential PSRGs. One soil sample location collected in 2008 near Building 9 indicated that the PCB compound Arochlor 1260 was detected at a concentration of 78 mg/kg in the 2 to 5 ft bgs depth interval. This concentration exceeds the Residential PSRG of 0.24 mg/kg. As such, PCB impacts in the vicinity of Building 9 may not be sufficiently delineated.

2) Depth of known or suspected contaminants (feet):

Based on results of Brownfields soil assessment activities, metal concentrations in soil exceeding Residential PSRGs are present between depths of 0 to 20 ft bgs. VOC concentrations exceeding are limited to deeper soil (15 to 20 ft bgs). Concentrations of VPH/EPH exceeding Residential PSRGs near the substation were present at surficial depths (0 to 1 ft bgs).

3) Area of soil disturbed by redevelopment (square feet):

Based on the proposed demolition activities, an approximate area of 80,000 square feet of building slabs will be removed and surficial soils exposed.

4) Depths of soil to be excavated (feet):

Only incidental soil disturbance during demolition activities is anticipated with removal of the existing concrete building slabs which are anticipated to be at an approximate depth of 0.5 feet below existing grade. As described herein, this EMP is intended to address demolition activities only. A revised and updated EMP will be provided to the NCDEQ Brownfields Project Manager for review and approval prior to the commencement of post-demolition redevelopment work at the Brownfields property. .

5) Estimated volume of soil (cubic yards) to be excavated (attach grading plan):

The most recent estimates indicate approximately 80,000 square feet up to a depth of 0.5 feet below grade (approximately 1,500 cubic yards of soil total) will be excavated during grading activities. However, these soils are not anticipated to be exported off-site. As described herein, this EMP is intended to address demolition activities only. A revised and updated EMP will be provided to the NCDEQ Brownfields Project Manager for review and approval prior to the commencement of post-demolition redevelopment work at the Brownfields property.

6) Estimated volume of excavated soil (cubic yards) anticipated to be impacted by contaminants:

It is unknown the quantity of impacted soil beneath building slabs. No samples have been

collected beneath the building footprints..

1) HAZARDOUS WASTE DETERMINATION:

7) Estimated volume of contaminated soil expected to be disposed of offsite, if applicable: No contaminated soils are expected to be disposed of off-site.

Part 1.A. MANAGING ONSITE SOIL

If soil is anticipated to be excavated from the Brownfield Property, relocated on the Brownfields Property, or otherwise disturbed during site grading or other redevelopment activities, please provide a grading plan that clearly illustrates areas of cut and fill (approximate areas & volumes are acceptable, if only preliminary data available).

a)	Does the soil contain a LISTED WASTE as defined in the North Carolina Hazardous
-	Waste Section under 40 CFR Part 261.31-261.35?□Yes ⊠No
	☐ If yes, explain why below, including the level of knowledge regarding processes generating the waste (include pertinent analytical results as needed).
	Click or tap here to enter text.

b)	NOTE: IF SOIL MEETS THE DEFINITION OF A LISTED HAZARDOUS WASTE AND EXCEEDS
	THE CONTAINED-OUT LEVELS IN ATTACHMENT 1 TO THE NORTH CAROLINA
	CONTAINED-IN POLICY THE SOIL MAY NOT BE RE-USED ON SITE AND MUST BE
	DISPOSED OF IN ACCORDANCE WITH DEQ HAZARDOUS WASTE SECTION RULES AND
	REGULATIONS.

c) Does the soil contain a CHARACTERISTIC WASTE?...... 🗆 Yes 🖾 No

☐ **If yes**, mark reason(s) why below (and include pertinent analytical results).

☐ **Ignitability** Click or tap here to enter text.

☐ If yes, do the soils exceed the "Contained-Out" levels in Attachment 1 of the

North Carolina Contained-In Policy?..... ☐ Yes ☐ No

☐ Corrosivity Click or tap here to enter text.
☐ Reactivity Click or tap here to enter text.
☐ Toxicity Click or tap here to enter text.
☐ TCLP results Click or tap here to enter text.
☐ Rule of 20 results (20 times total analytical results for an individual hazardous constituent on TCLP list cannot, by test method, exceed regulatory TCLP standard)

If no, explain rationale:

Click or tap here to enter text.

Given the size of the floored area (~80,000 square feet), we anticipate that the slabs will be removed in stages. Each area of removed slab will be evaluated as described in Mid-Atlantic's *Final Grade Characterization Work Plan* that will be submitted under separate cover. Once laboratory analyses are received, the results will be compared to the current IHSB Residential PSRGs and entered into the current version of the NCDEQ Risk Calculator for evaluation for carcinogenic and noncarcinogenic risk. Based on the actual final development plan, the PD may elect to leave impacted soils in place if these soils do not represent an unacceptable risk. If, based on laboratory analysis, risk calculations and/or development scenario impacted soil requires removal, the soil will be excavated and appropriately stored on site pending appropriate profiling and/or additional laboratory analysis for proper, manifested disposal.

- d) NOTE: IF SOIL MEETS THE DEFINITION OF A CHARACTERISTIC HAZARDOUS WASTE, THE SOIL MAYNOT BE RE-USED ON SITE AND MUST BE DISPOSED OF IN ACCORDANCE WITH DEQ HAZARDOUS WASTE SECTION RULES AND REGULATIONS.
- 2) Screening criteria by which soil disposition decisions will be made (e.g., left in place, capped in place with low permeability barrier, removed to onsite location and capped, removed offsite):

have a harmonia to the same and
☑ Preliminary Health-Based Residential SRGs
☐ Preliminary Health-Based Industrial/Commercial SRGs
oxtimes Division of Waste Management Risk Calculator (For Brownfields Properties Only)
$\hfill\Box$ Site-specific risk-based cleanup level. Please provide details of methods used for determination/explanation.

Soils beneath the slabs will be evaluated as described in Mid-Atlantic's *Final Grade Characterization Work Plan* that will be submitted under separate cover. Please note that this work plan has not yet received final NCDEQ approval. Once laboratory analyses are received, the results will be compared to the current IHSB Residential PSRGs and entered into the current version of the NCDEQ Risk Calculator for evaluation for carcinogenic and noncarcinogenic risk. Based on the actual final development plan, the PD may elect to leave impacted soils in place if these soils do not represent an unacceptable risk. If, based on laboratory analysis, risk calculations and/or development scenario impacted soil requires removal, the soil will be excavated and appropriately stored on site pending appropriate profiling and/or additional laboratory analysis for proper, manifested disposal.

Additional comments:

Click or tap here to enter text.

- 3) If known impacted soil is proposed to be reused within the Brownfields Property Boundary, please check the measures that will be utilized to ensure safe placement and documentation of same. Please attach a proposed location diagram/site map.
 - ☑ Provide documentation of analytical report(s) to Brownfields Project Manager

	to Brownfields Project Manager once known
	☐ Geotextile to mark depth of fill material.
	Provide description of material: If contaminated soil is found below slab or sub-grade features and removal is infeasible and contaminated soil is left in place, the top of contaminated material should be marked with a geotextile or orange silt fencing to distinguish between demonstrated clean fill material and contaminated soil below.
	☑ Manage soil under impervious cap ☑ or clean fill ☑
	☑ Describe cap or fill:
	Any documented impacted soils will be covered with impervious surfaces (asphalt pavement, sidewalks, access roads, buildings, etc.) or a minimum of 2 ft of documented clean fill during redevelopment
	☑ Confer with NC BF Project Manager if Brownfield Plat must be revised (or re-recorded if actions are Post-Recordation).
	☐ GPS the location and provide site map with final location.
	Other. Please provide a description of the measure:
	Click or tap here to enter text.
4)	Please describe the following action(s) to be taken during and following excavation and management of site soils:
	Management of fugitive dust from site
	✓ Yes, describe the method will include:
	Soils beneath the slabs will be evaluated as described in Mid-Atlantic's <i>Final Grade Characterization Work Plan</i> that will be submitted under separate cover. All field activities will be conducted under direct supervision of a Mid-Atlantic geologist
	☐ No, explain rationale:
	Click or tap here to enter text.
	Field Screening of site soil
	☐ Yes, describe the field screening method, frequency of field screening, person conducting
	field screening: Soils beneath the slabs will be evaluated as described in Mid-Atlantic's Final Grade
	Characterization Work Plan that will be submitted under separate cover. All field activities
	will be conducted under direct supervision of a Mid-Atlantic geologist
	☐ No, explain rationale:
	Click or tap here to enter text.

oxtimes Provide documentation of final location, thickness and depth of relocated soil on site map

Soil Sample Collection

☑ Yes, describe the sampling method (e.g., in-situ grab, composite, stockpile, etc.):
Soils beneath the slabs will be evaluated as described in Mid-Atlantic's Final Grade
Characterization Work Plan that will be submitted under separate cover. All field activities
will be conducted under direct supervision of a Mid-Atlantic geologist.
□ No, explain rationale:
Click or tap here to enter text.
If soil samples are collected for analysis, please check the applicable chemical analytes: Uvolatile organic compounds (VOCs) by EPA Method 8260
\square Semi-volatile organic compounds (SVOCs) by <u>EPA Method 8270</u>
☐ Metals RCRA List (8) (arsenic, barium, cadmium, chromium, mercury, lead, selenium and silver): Specify Analytical Method Number(s): Click or tap here to enter text.
Pesticides: Specify Analytical Method Number(s): Click or tap here to enter text.
☐ PCBs: Specify Analytical Method Number(s): Click or tap here to enter text.
☐ Other Constituents & Respective Analytical Method(s) (i.e. Hexavalent Chromium, Herbicides, etc.): Specify Analytical Method Number(s): Click or tap here to enter text.
☑ Check to confirm that stockpiling of known or suspected impacted soils will be conducted in accordance with Figure 1 of this EMP. Stockpile methodology should provide erosion control, prohibiting contact between surface water/precipitation and contaminated soil, and preventing contaminated runoff. Explain any variances or provide additional details as needed:
Click or tap here to enter text.
 ☐ Final grade sampling of exposed native soil (i.e., soil that will not be under buildings or permanent hardscape). Select chemical analyses for final grade samples with check boxes below (Check all that apply): ☐ Volatile organic compounds (VOCs) by EPA Method 8260
☐ Semi-volatile organic compounds (SVOCs) by EPA Method 8270
 Metals RCRA List (8) (arsenic, barium, cadmium, chromium, mercury, lead, selenium and silver): Specify Analytical Method Number(s): Click or tap here to enter text.

	Click or tap here to enter text.
	☐ PCBs: Specify Analytical Method Number(s): Click or tap here to enter text.
	☐ Other Constituents & Respective Analytical Method(s) (i.e. Hexavalent Chromium, Herbicides, etc.): Click or tap here to enter text.
	Please provide a scope of work for final grade sampling, including a diagram of soil sampling locations, number of samples to be collected, and brief sampling methodology. Samples should be collected from 0-2 ft below ground surface, with the exception of VOCs which should be taken from 1-2 ft below ground surface. Alternatively, a work plan for final grade sampling may be submitted under separate cover.
	A Final Grade Soil Characterization Work Plan has been submitted under separate cover.
	☐ If final grade sampling was <u>NOT</u> selected please explain rationale: Click or tap here to enter text.
	Part 1.B. IMPORTED FILL SOIL
FR im ap by	O SOIL MAY BE BROUGHT ONTO THE BROWNFIELDS PROPERTY WITHOUT PRIOR APPROVAL ROM THE BROWNFIELDS PROGRAM. According to the Brownfields IR 15, "Documenting an approved soil (by sampling, analysis, and reporting in accordance with review and written approval in advance by the Brownfields Program), will safeguard the liability protections provided the brownfields agreement and is in the best interest of the prospective developer/property wner."
Re	equirements for importing fill:
1)	Will fill soil be imported to the site? ☐ Yes ☐ No ☐ Unknown
2)	If yes, what is the estimated volume of fill soil to be imported? Not Applicable.
-	
3)	Not Applicable. If yes, what is the anticipated depth that fill soil will be placed at the property? (If a range of depths, please list the range.) Not Applicable. Provide the source of fill, including: location, site history, nearby environmental concerns,
3)	Not Applicable. If yes, what is the anticipated depth that fill soil will be placed at the property? (If a range of depths, please list the range.) Not Applicable.
3)	Not Applicable. If yes, what is the anticipated depth that fill soil will be placed at the property? (If a range of depths, please list the range.) Not Applicable. Provide the source of fill, including: location, site history, nearby environmental concerns, etc. Attach aerial photos, maps, historic Sanborn maps and a borrow source site history:

5) PRIOR TO ITS PLACEMENT AT THE BROWNFIELDS PROPERTY, provide a plan to analyze fill soil to demonstrate that it meets acceptable standards applicable to the site and can be approved for use at the Brownfields property.

If import soil is needed, one sample per 1,000 cubic yards of imported soil will be collected unless the imported soil comes from a permitted quarry approved by NCDEQ.

- 6) Please check the applicable chemical analytes for fill soil samples. (Check all that apply):

 ☑ Volatile organic compounds (VOCs) by EPA Method 8260

 ☑ Semi-volatile organic compounds (SVOCs) by EPA Method 8270

 ☑ Metals RCRA List (8) (arsenic, barium, cadmium, chromium, mercury, lead, selenium and silver): Specify Analytical Method Number(s):

 EPA Methods 6020/7471.

 ☐ Pesticides: Specify Analytical Method Number(s):

 Click or tap here to enter text.

 ☐ PCBs: Specify Analytical Method Number(s):

 Click or tap here to enter text.

 ☑ Other Constituents & Respective Analytical Method(s) (i.e. Hexavalent Chromium, Herbicides, etc.):
- 7) The scope of work for import fill sampling may be provided below or in a Work Plan submitted separately for DEQ review and approval. Attach specific location maps for in-situ borrow sites. If using a quarry, provide information on the type of material to be brought onto the Brownfields Property.

Hexavalent Chromium by EPA Method 7199

If import soil becomes necessary during redevelopment of the site, the PD will follow the procedures outlined below to demonstrate import soil meets acceptable standards applicable to the site.

If the PD plans to import virgin fill material from Vulcan Materials Company quarry located near Pineville, NC or from the Martin Marietta quarry located on Beatties Ford Road in Charlotte, NC, no samples of the import material will be collected as adequate analytical data is available in the NCDEQ database to demonstrate material from these facilities is suitable for use as structural fill at a Brownfields property.

If fill soil is obtained from an off-site property that is not a known permitted quarry or is recycled material from the Vulcan Materials Company quarry or the Martin Marietta quarry, a sampling plan will be developed and submitted for NCDEQ review. NCDEQ approval of the sampling plan and analytical results will be obtained prior to transporting import soil to the site.

The specific sampling rate will be outlined in the aforementioned sampling plan. However, if the proposed borrow source has not been previously developed (i.e., virgin land), soil samples will be

collected for laboratory analyses indicated above at a general rate of one per 1,000 cubic yards. If the borrow source property has been previously developed, soil samples will be collected for laboratory analyses indicated above at a general rate of approximately one per 500 cubic yards.

Fill soil will be considered suitable for use at the site if it does not contain compound concentrations above NCDEQ IHSB Residential PSRGs, DWM Risk Calculator risk thresholds, or typical metals concentrations which are consistent with background levels identified at the site.

Part 1.C. EXPORTED SOIL

NO SOIL MAY LEAVE THE BROWNFIELDS PROPERTY WITHOUT APPROVAL FROM THE BROWNFIELDS PROGRAM. FAILURE TO OBTAIN APPROVAL MAY VIOLATE A BROWNFIELDS AGREEMENT CAUSING A REOPENER OR JEOPARDIZING ELIGIBILITY IN THE PROGRAM, ENDANGERING LIABILITY PROTECTIONS AND MAKING SAID ACTION POSSIBLY SUBJECT TO ENFORCEMENT. JUSTIFICATIONS PROVIDED BELOW MUST BE APPROVED BY THE PROGRAM IN WRITING PRIOR TO COMPLETING TRANSPORT ACTIVITIES. Please refer to Brownfields IR 15 for additional details.

 If export from a Brownfields Property is anticipated, please provide details regarding the proposed export actions. Volume of exported soil, depths, location from which soil will be excavated on site, related sampling results, etc. Provide a site map with locations of export and sampling results included.

Any contaminated soil that must be transported off-site for disposal will be stockpiled on plastic. Disposal facilities will be contacted for disposal analytical requirements with representative soil samples collected and analyzed per the disposal facility requirements. Mid-Atlantic will prepare the appropriate waste profile and disposal manifests for transport and proper disposal to the appropriate facility. A disposal certificate will be maintained in the project files and included in subsequent reports.

- 2) To what type of facility will the export Brownfields soil be sent?
 - ☑ Subtitle D/Municipal Solid Waste Landfill (analytical program to be determined by landfill)
 - ☑ **Permitted but Unlined Landfill** (i.e. LCID, C&D, etc.) Analytical program to be determined by the accepting Landfill;
 - □ Landfarm or other treatment facility
 - ☑ Use as fill at another suitable Brownfields Property determination that a site is suitable will require, at a minimum, that similar concentrations of the same or similar contaminants already exist at both sites, use of impacted soil will not increase the potential for risk to human health and the environment at the receiving Brownfields property, and that a record of the acceptance of such soil from the property owner of the receiving site is provided to Brownfields. Please provide additional details below.
 - ☑ Use as Beneficial Fill off-site at a non-Brownfields Property Please provide

documentation of approval from the property owner for receipt of fill material. This will also require approval by the DEQ Solid Waste Section. Additional information is provided in IR 15. Please provide additional details below.

3) Additional Details: (if transfer of soil to another property is requested above, please provide details related to the proposed plans).

The environmental engineer will contact NCDEQ Brownfields to obtain NCDEQ Brownfields and NCDEQ Solid Waste approval prior to exporting soil to a non-Brownfields property or non-permitted disposal facility. A summary of building materials is provided below and technical reports are provided in **Appendix C** and **Appendix D**.

As part of a *Hazardous Materials Survey Report* prepared by Terracon and provided in **Appendix C**, 1,036 bulk samples of suspected ACM and 320 paint chip samples suspected for lead-based paint from buildings across the Site between July and September. Laboratory results indicated ACM was identified in sixteen (16) of the remaining twenty-five (25) buildings and lead-based paint was identified in twenty-four (24) of the twenty-five (25) buildings.

A Hazard Characteristic Determination for Beneficial Reuse Assessment Report was prepared by Mid-Atlantic for the characterization of various building materials remaining on-Site for potential reuse as road base. This report is provided in Appendix D. The characterization included concrete masonry units (CMUs) and concrete building materials. Results of the assessment indicated lead-based paint and trace lead-based paint were identified on CMU block and concrete components during the survey. However, following TCLP analysis of the components containing the highest concentrated lead-based paint, lead was not detected. Mid-Atlantic concluded that the CMU block and concrete building materials on-Site can be classified as non-hazardous waste. Furthermore, twenty-six (26) samples of CMU block surfacing contained less than 1% chrysotile asbestos following the EPA approved Polarized Light Microscopy (PLM) point-count by gravimetrical reduction analysis. Since the EPA and the State of North Carolina do not recognize <1% asbestos-containing materials as hazardous materials, the CMU block surfacing material would be considered non-regulated and demolition activities for this material would not be subject to NESHAP regulations. However, Occupational Safety and Health Administration (OSHA) regards materials with any amount of asbestos to be a potential exposure hazard if the material is disturbed. Therefore, work practices specified in the OSHA Standard (CFR 29 1962.1101) must be followed when these materials are disturbed, removed, or demolished. As such, these measures will be implemented during demolition activities.

Mid-Atlantic determined that less than 1,500 linear feet of exterior white block pipe insulation was asbestos-containing, contrary to the previous assumption that all exterior white block pipe insulation was asbestos-containing. Mid-Atlantic also determined that the non-hazardous nature of the CMU block and concrete building materials on-site should not hinder the ability for future crushing and off-site disposal of those building materials. The PD will notify NCDEQ to acquire approval for the volume/final destination (i.e., approved facility from #2 of this section)

of crushed building slabs.
Part 1.D. MANAGEMENT OF UTILITY TRENCHES
☐ Install liner between native impacted soils and base of utility trench before filling with clean fill (Preferred)
☑ Last out, first in principle for impacted soils (if soil can safely be reused onsite and is not a hazardous waste), i.e., impacted soils are placed back at approximately the depths they were removed from such that impacted soil is not placed at a greater depth than the original depth from which it was excavated.
☐ Evaluate whether necessary to install barriers in conduits to prevent soil vapor transport, and/or degradation of conduit materials due to direct impact with contaminants?
☐ If yes, provide specifications on barrier materials: Click or tap here to enter text.
☑ <u>If no</u> , include rationale here:
Currently, no utility trenches are planned in areas of soil contamination.
Other comments regarding managing impacted soil in utility trenches:
As described herein, this EMP is intended to address demolition activities only, which does not include
the installation of utilities. A revised and updated EMP will be provided to the NCDEQ Brownfields
Project Manager for review and approval prior to the commencement of post-demolition
redevelopment work at the Brownfields property, including the installation of utilities.
PART 2. GROUNDWATER – Please fill out the information below.
1) What is the depth to groundwater at the Brownfields Property?
During Brownfields assessment activities conducted at the site, the potentiometric groundwate
surface in the vicinity of the buildings along North Main Street was measured at a depth ranging
from approximately 70 ft bgs to 90 ft bgs. Groundwater near the South Fork of the Catawba
River was measured at a depth ranging from 10 ft bgs to 20 ft bgs.
2) Is groundwater known to be contaminated by ⊠onsite □offsite □both or □unknown sources? Describe source(s):
The former textile manufacturing and wastewater treatment operations on-site have resulted in

the identified groundwater impacts on the Brownfields property. Groundwater impacts appear to be present in the central portion of the site where former milling operations were conducted and to the northeast in monitoring wells installed near the South Fork of the Catawba River. No

additional compounds were detected in groundwater at concentrations exceeding 2L Standards. A summary of groundwater analytical data is provided in **Appendix A** and groundwater sample locations are shown in **Appendix B**.

3) What is the direction of groundwater flow at the Brownfields Property?
Based on depth to water measurements collected at the Brownfields property, shallow groundwater is expected to flow to the northeast towards the South Fork of the Catawba River.

4) Will groundwater likely be encountered during planned redevelopment activities?
□Yes ⊠No
If yes, describe these activities:
Click or tap here to enter text.

Regardless of the answer; in the event that contaminated groundwater is encountered during redevelopment activities (evenif no is checked above), list activities for contingent management of groundwater (e.g., dewatering of groundwater from excavations or foundations, containerizing, offsite disposal, discharge to sanitary sewer, NPDES permit, or sampling procedures).

Appropriate worker safety measures will be undertaken if groundwater gathers in an open excavation within an area determined to be impacted during construction activities. The accumulated water will be allowed to evaporate/infiltrate to the extent time for dissipation does not disrupt the construction schedule. Should the time needed for natural dissipation of accumulated water be deemed inadequate, the water will be tested and disposed off-site (if impacted) in accordance with applicable municipal and State regulations for erosion control and construction stormwater control.

5)	Are monitoring wells currently present on the Brownfields Property? \boxtimes Yes \square No If yes, are any monitoring wells routinely monitored through DEQ or other
	agencies?⊠Yes □No
6)	Please check methods to be utilized in the management of known and previously unidentified wells.
	☐ Abandonment of site monitoring wells in accordance with all applicable regulations. It is the Brownfields Program's intent to allow proper abandonment of well(s) as specified in the Brownfields Agreement, except if required for active monitoring through another section of DEQ or the EPA.
	□ Location of existing monitoring wells marked
	☐ Existing monitoring wells protected from disturbance
	□ Newly identified monitoring wells will be marked and protected from further disturbance until notification to DEQ Brownfields can be made and approval for abandonment is given.

7) Please provide additional details as needed:

Thirteen (13) permanent monitoring wells, one (1) recovery well, and two (2) water supply wells are located on the Brownfields property and depicted in Appendix B. Monitoring wells are not anticipated

to be impacted during demolition activities described in this EMP. Additionally, monitoring wells MW-1, MW-4, MW-6, and MW-7 and water supply well WSW-W are located near buildings proposed for demolition. As such, these monitoring wells will be protected during demolition activities.

Please note, disturbance of existing site monitoring wells without approval by DEQ is not permissible. If monitoring wells are damaged and/or destroyed, DEQ may require that the PD be responsible for replacement of the well.

	PART 3. SURFACE WATER -Please fill out the information below.
1)	Is surface water present at the property? $\ \square$ Yes $\ \boxtimes$ No
2)	<u>Attach a map</u> showing the location of surface water at the Brownfields Property.
3)	Is surface water at the property known to be contaminated? \square Yes $\ oxtimes$ No
4)	Will workers or the public be in contact with surface water during planned redevelopment activities? $\ \square$ Yes $\ \boxtimes$ No
5)	In the event that contaminated surface water is encountered during redevelopment activities, or clean surface water enters open excavations, list activities for management of such events (e.g. flooding, contaminated surface water run-off, stormwater impacts): If surface water run-off gathers in an open excavation within an area determined to be impacted during construction activities, appropriate worker safety measures will be undertaken. The accumulated water will be allowed to evaporate/infiltrate to the extent time for dissipation does not disrupt the construction schedule. Should the time needed for natural dissipation of accumulated water be deemed inadequate, the water will be tested and disposed off-site (if impacted) in accordance with applicable municipal and State regulations for erosion control and construction stormwater control.
	PART 4. SEDIMENT – Please fill out the information below.
1)	Are sediment sources present on the property? Yes No
2)	If yes, is sediment at the property known to be contaminated: \square Yes $\ oxed{\boxtimes}$ No
3)	Will workers or the public be in contact with sediment during planned redevelopment activities? $\ \square$ Yes $\ \boxtimes$ No
4)	Attach a map showing location of known contaminated sediment at the property.
5)	In the event that contaminated sediment is encountered during redevelopment activities, list

activities for management of such events (stream bed disturbance):

PART 5. SOIL VAPOR – Please fill out the information below.

1)	Do concentrations of volatile organic compounds at the Brownfields property exceed the following vapor intrusion screening levels (current version) in the following media: IHSB <u>Residential</u> Screening Levels: Soil Vapor:
	IHSB <u>Industrial/Commercial</u> Screening Levels: Soil Vapor: ☐ Yes ☒ No ☐ Unknown Groundwater: ☒ Yes ☐ No ☐ Unknown
2)	Attach a map showing the locations of soil vapor contaminants that exceed site screening levels.
3)	If applicable, at what depth(s) is soil vapor known to be contaminated?
	Sub-slab vapor samples were collected within the footprint of Buildings 2 and 3A as part of previous Brownfields assessment activities. A summary of soil vapor laboratory analytical results is provided in Appendix A .
	Laboratory analytical results indicate that the VOCs bromodichloromethane, chloroform, and 1,2-dibromomethane were detected at concentrations above Residential Sub-Slab and Exterior Soil Gas Screening Levels in the soil vapor samples collected. Utilizing the NCDEQ risk calculator, concentrations did not exceed acceptable risk levels under a residential use scenario.
4)	Will workers encounter contaminated soil vapor during planned redevelopment activities? ☐ Yes ☐ No ☒ Unknown
5)	In the event that contaminated soil vapor is encountered during redevelopment activities (trenches, manways, basements or other subsurface work,) list activities for management of such contact:
	No exposure is anticipated as any soil gas will be vented to the atmosphere during redevelopment and construction activities. Should soil vapor be encountered, workers will be removed from the area(s) until air monitoring can be conducted. Additional ventilation equipment will be utilized to the extent necessary to return the ambient air to acceptable levels. NCDEQ will be notified in the event soil vapors are encountered.

	PART 6. SUB-SLAB SOIL VAPOR – Please fill out the information below if existing buildings or foundations will be retained in the redevelopment.
1)	Are sub-slab soil vapor data available for the Brownfields Property? ⊠ Yes □ No □ Unknown
2)	If data indicate that sub-slab soil vapor concentrations exceed screening levels, <u>attach a map</u> showing the location of these exceedances.
3)	At what depth(s) is sub-slab soil vapor known to be contaminated? ⊠0-6 inches □Other, please describe:
	No sub-slab vapor samples have been collected in buildings that will be retained at the
	Brownfields property. See Section 5 above for results of sub-slab sampling results collected at the
	Brownfields property.
4)	Will workers encounter contaminated sub-slab soil vapor during planned redevelopment activities? \square Yes \square No \boxtimes Unknown
5)	In the event that contaminated soil vapor is encountered during redevelopment activities, list activities for management of such contact
	In the unlikely event impacted soil vapors are encountered during future redevelopment
	activities, worker breathing zone will be monitored using a calibrated photoionization detector.
	If results indicate further action is warranted, appropriate engineering controls (such as use of
	industrial fans) will be implemented.
	PART 7. INDOOR AIR – Please fill out the information below.
1)	Are indoor air data available for the Brownfields Property? \square Yes $\ oxdot$ No $\ \square$ Unknown
2)	Attach a map showing the location(s) where indoor air contaminants exceed site screening levels.
3)	If the structures where indoor air has been documented to exceed risk-based screening levels will not be demolished as part of redevelopment activities, will workers encounter contaminated indoor air during planned redevelopment activities? Yes No Unknown
4)	In the event that contaminated indoor air is encountered during redevelopment activities, list activities for management of such contact:
	All on-site structures are unoccupied and all but two are planned for demolition. There will be
	adequate ventilation during the demolition as the facility has multiple large, roll-up doors providing
	access between the building interior and exterior ambient air

VAPOR INTRUSION MITIGATION SYSTEM – Please fill out the information below.

 ☐ Yes ☐ No ☐ Unknown If yes, ☐ VIMS Plan Attached or ☐ VIMS Plan to be submitted separately If submitted separately provide date: Click or tap here to enter text. VIMS Plan shall be signed and sealed by a NC Professional Engineer If no, please provide a brief rationale as to why no vapor mitigation plan is warranted:
As described herein, this EMP is intended to address demolition activities only. A revised and updated EMP will be provided to the NCDEQ Brownfields Project Manager for review and approval prior to the commencement of post-demolition redevelopment work at the Brownfields property.
CONTINGENCY PLAN – encountering unknown tanks, drums, or other waste materials
In this section please provide actions that will be taken to identify or manage unknown potential new sources of contamination. During redevelopment activities, it is not uncommon that unknown tanks, drums, fuel lines, landfills, or other waste materials are encountered. Notification to DEQ Brownfields Project Manager, UST Section, Fire Department, and/or other officials, as necessary and appropriate, is required when new potential source(s) of contamination are discovered. These Notification Requirements were outlined on Page 1 of this EMP. Should potentially impacted materials be identified that are inconsistent with known site impacts, the DEQ Brownfields Project Manager will be notified and a sampling plan will be prepared based on the EMP requirements and site-specific factors. Samples will generally be collected to document the location of the potential impacts.
Check the following chemical analysis that are to be conducted on newly identified releases: ☐ Volatile organic compounds (VOCs) by EPA Method 8260
·
 ✓ Volatile organic compounds (VOCs) by <u>EPA Method 8260</u> ✓ Semi-volatile organic compounds (SVOCs) by <u>EPA Method 8270</u> ✓ Metals RCRA List (8) (arsenic, barium, cadmium, chromium, mercury, lead, selenium and silver)

☑ Other Constituents & Analytical Method(s) (i.e. Hexavalent Chromium, Herbicides, etc.)
Please note, if field observations indicate the need for additional analyses, they should

be conducted, even if not listed here.

Hexavalent Chromium by EPA Method 7199

Please provide details on the proposed methods of managing the following commonly encountered issues during redevelopment of Brownfields Properties.

During construction activities, contractors may encounter unknown sub-surface environmental conditions (i.e., tanks, drums, or waste materials) that if encountered, will require proper management. Prior to beginning site work, Mid-Atlantic will attend a pre-construction kick-off meeting with the PD and the redevelopment contractors to discuss the NCDEQ approved EMP and various scenarios when it would be appropriate and necessary to notify Mid-Atlantic of the discovery of unknown subsurface features or potentially impacted media at the site. In the event that such conditions are encountered during redevelopment activities, the environmental actions noted below will be used to assist in appropriate management of sub-surface environmental conditions and determination of the most suitable final disposition of potentially impacted site media.

Underground Storage Tanks:

In general, USTs will be addressed in accordance with the most recent version of NCDEQ *UST Guidelines For Site Checks, Tank Closure, And Initial Response And Abatement For UST Releases* requirements. The Brownfield Project Manager and NCDEQ-Mooresville Regional Office will be notified of the presence of UST(s). If USTs or impacts associated with a UST release are discovered at the site during redevelopment activities, the UST and/or UST related impacts will be addressed through the Brownfields Program. NCDEQ Brownfields will be notified within 48-hours of discovery of the UST.

If an unknown UST is encountered, the UST will be removed, if possible and the UST will be transported off-site for disposal or recycling at a suitable facility. If the UST contains unknown residual fluids, the fluids will be sampled for VOCs, SVOCs, and RCRA metals, and transported off-site for disposal at a suitable facility based on the laboratory analytical results prior to removing the UST from the ground. If a UST is encountered that cannot be removed, it may be abandoned in place with prior NCDEQ approval and construction will proceed. Where appropriate, the bottom may be penetrated before abandonment to prevent fluid accumulation. Impacted soil in the vicinity of the UST will be managed in accordance with the Managing On-Site Soil section outlined above.

Sub-Grade Feature/Pit:

If a sub-grade feature or pit is encountered, it will be removed, if possible and will be transported off-site for disposal or recycling at a suitable facility. If a sub-grade feature or pit is encountered and cannot be removed, it will be filled with soil or suitable fill and construction will proceed. Where appropriate, the bottom may be penetrated before back filling to prevent fluid accumulation. If the pit has waste in it, the waste may be set aside in a secure area and will be sampled for waste disposal purposes for TCLP VOCs, TCLP SVOCs, and TCLP metals and disposed off-site at a permitted facility or the waste will be managed in accordance with the Managing On-Site Soil section outlined above in the EMP, whichever is most applicable based on the type of waste

present. If the pit must be removed and the observed waste characteristics indicate the pit materials (i.e., concrete or brick) may potentially be contaminated to a significant degree, the pit material will be sampled and analyzed by methods specified by the disposal facility.

Buried Waste Material:

If excavation into buried wastes or significantly impacted soils occurs, the contractor is instructed to stop work in that location and notify the environmental consultant. The environmental consultant will observe the materials and collect samples for laboratory analysis, if warranted. Confirmation sampling will be conducted at representative locations in the base and the sidewalls of the excavation after the waste or significantly impacted soil is removed and transported off-site for disposal in a suitable facility based on results of the sample laboratory analysis. The confirmation samples will be analyzed for VOCs, SVOCs, and RCRA metals. Areas of suspected contaminated soil that remain at the site after excavation is complete above the NCDEQ IHSB Residential PSRGs will be managed pursuant to this plan.

Re-Use of Impacted Soils On-Site:

Please refer to description outlined in the Managing On-Site Soil section of the EMP above.

If unknown, impacted soil is identified on-site, management on-site can be considered after the project team provides the necessary information, outlined in Part 1.A. Item 11, for Brownfields Project Manager approval prior to final placement on-site.

If other potential contingency plans are pertinent, please provide other details or scenarios as needed below:

Click or tap here to enter text.

POST-REDEVELOPMENT REPORTING

☑ Check this box to acknowledge that a Redevelopment Summary Report will be required for the project. If the project duration is longer than one year, an annual update is required and will be due by January 31 of each year, or 30 days after each one-year anniversary of the effective date of this EMP (as agreed upon with the Project Manager). These reports will be required for as long as physical redevelopment of the Brownfields Property continues, except that the final Redevelopment Summary Report will be submitted within 90 days after completion of redevelopment. Based on the estimated construction schedule, the first Redevelopment Summary Report is anticipated to be submitted on TBD. As described herein, this EMP is intended to address demolition activities only. A revised and updated EMP will be provided to the NCDEQ Brownfields Project Manager for review and approval prior to the commencement of post-demolition redevelopment work at the Brownfields property. A post-demolition report, including discussion of sampling activities conducted, findings, along with supporting documentation (photos, laboratory data sheets, figures, and tables), sealed by a North Carolina Licensed Geologist will be provided at

the conclusion of the demolition activities and prior to any site redevelopment.

The Redevelopment Summary Report shall include environment-related activities since the last report, with a summary and drawings, that describes:

- 1. actions taken on the Brownfields Property;
- 2. soil grading and cut and fill actions;
- 3. methodology(ies) employed for field screening, sampling and laboratory analysis of environmental media;
- 4. stockpiling, containerizing, decontaminating, treating, handling, laboratory analysis and ultimate disposition of any soil, groundwater or other materials suspected or confirmed to be contaminated with regulated substances; and
- 5. removal of any contaminated soil, water or other contaminated materials (for example, concrete, demolition debris) from the Brownfields Property (copies of all legally required manifests shall be included).

☑ Check box to acknowledge consent to provide a NC licensed P.G. or P.E. sealed, Redevelopment Summary Report in compliance with the site's Brownfields Agreement.

APPROVAL SIGNATURES

Brownfields Project Number: 25089-21-036

Brownfields Project Name: Yorkshire Americas III

Prospective Developer: The City of Lowell

Printed Name/Title/Company: Scott Attaway

City Manager / The City of Lowell

Date 9/13/2022

Consultant: Mid-Atlantic Associates, Inc.

Printed Name/Title/Company: Shane Sisco, P.G. Project Hydrogeologist / Mid-Atlantic Associates, Inc.

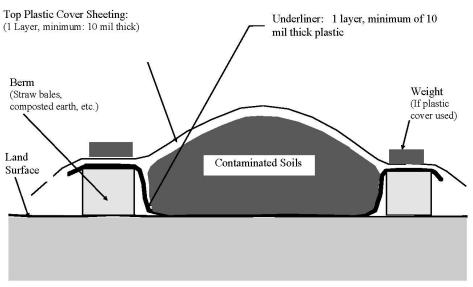
Date 9/13/2022

Brownfields Project Manager: Joselyn Harriger

Date 9/15/2022

Figure 1 NCBP Diagram for Temporary Containment of Impacted or Potentially Impacted Soil

Cross-Section View



Straw Bale Berm

Weight

Contaminated Soils

Plastic Sheeting

Note: Adapted from NC DEQ UST Section "Guidelines for Ex Situ Petroleum Contaminated Soil Remediation" dated December, 1, 2013