

**APPENDIX H – CARNOW, CONIBER
& ASSOC., LTD., REMEDIAL
ACTION PLAN (RAP), JANUARY 31,
2024**

Remedial Action Plan

Remediation Site:

**0316275397/Cook County
Chicago/Resilient Corridor Fifth Avenue Eco Orchard – South Parcel
3001-13 W. Fifth Avenue
Chicago, Illinois 60612**



Prepared For: **City of Chicago Department of Assets, Information and Services (AIS)**
Bureau of Environmental, Health, and Safety Management
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Report Issue Date: January 31, 2024



Remedial Action Plan

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**0316275397/Cook County
Chicago/Resilient Corridor Fifth Avenue Eco Orchard – South Parcel
3001-13 W. Fifth Avenue
Chicago, Illinois 60612**

A handwritten signature in black ink, appearing to read "CA", written over a horizontal line.

Prepared by: _____

Chad Adams, P.G.
Senior Project Manager

A handwritten signature in black ink, reading "David S. Bremer", written over a horizontal line.

Reviewed by: _____

David S. Bremer, CHMM, REM
Vice President, Environmental Engineering

Carnow Conibear Project # E160520014-26

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1.0 REMEDIAL ACTION PLAN

This Remedial Action Plan (RAP) describes the remedial activities that will be conducted at the Resilient Corridor Fifth Avenue Eco Orchard Site at 3001-13 Fifth Avenue in Chicago, IL 60612, **Exhibit I**, prior to and during the site redevelopment process. This RAP was created utilizing the Comprehensive Site Investigation Report and Remedial Objectives Report (CSI/ROR) dated July 24, 2019 by Brecheisen Engineering Inc. and conditionally approved by the Illinois Environmental Protection Agency (IEPA) on October 17, 2019; and the CSI/ROR Response to Comments dated January 31, 2024 prepared by Carnow Conibear. The remedial activities will include excavation and off-site soil disposal of soils with contaminant of concern (COC) concentrations exceeding Tier 1 Site Remediation Objectives (SROs) for the residential soil ingestion exposure route [**Exhibits II(a) & II(b)**]. The soils with COC concentrations exceeding Tier 1 SROs for the construction worker soil ingestion and inhalation exposure routes [**Exhibits III(a) & III(b) and Exhibits IV(a) & IV(b)**] will be addressed through the implementation of a site-specific health and safety plan during construction activities.

1.1 General Remediation Site Controls

1.1.1 Site Safety/Security

The Remediation Site will be enclosed with a safety fence prior to the start of any remediation activities. Entrance areas will also be enclosed with a fence during non-working hours.

1.1.2 Dust Control

Dust migration during remediation shall be reduced by applying potable water to the surface with water trucks or other sprinkling methods when dry soil conditions exist, covering trucks and stockpiles, and other methods. Water will not be used when it may create hazardous or objectionable conditions such as ice, flooding, or pollution. Additionally, fabric will be utilized on the construction fence to provide additional dust control, and street sweeper services will be provided as necessary.

1.2 Soil Excavation

As detailed in the ROR, within the Response to Comments dated January 31, 2024, soils which exhibited Tier 1 SRO exceedances for the residential ingestion [**Exhibit II(a) & Exhibit II(b)**] will be remediated through limited soil removal and off-site disposal for installation of engineered barriers, and implementation of institutional controls requiring the maintenance of engineered barriers. An engineered barrier map showing which areas require remediation and installation of barriers is provided as **Exhibit V**.

Surface soils will be excavated to appropriate depths to install the engineered barriers per design specifications and the requirements of each barrier being installed. Additional soils will be excavated to allow for the installation and removal of utilities and other development features. Soils removed from the Remediation Site will be properly characterized and disposed in accordance with all local, state, and federal regulations. Waste tracking documentation of soils removed from the Remediation Site will be provided in the Remedial Action Completion Report (RACR).

1.3 Engineered Barriers

Engineered barriers will be placed over the portions of the Remediation Site in which Tier 1 SRO exceedances were encountered for the residential ingestion exposure route. **Exhibit V** depicts the proposed locations of engineered barriers at the Remediation Site. The following proposed engineered barrier types comply with the requirements of 35 IAC 742:

- Asphalt or concrete pavement – 35 IAC 742.1105(c)(2)(A)
- Landscaped – 35 IAC 742.1105(c)(2)(C)

The following alternative engineered barrier is being proposed pursuant to 35 IAC 742.1105(d). Landscaped areas requiring engineered barriers will feature a minimum of three feet of clean fill material as stipulated above, or, alternatively, a minimum of 18 inches of clean fill material underlain by geotextile fabric. The following figure depicts a cross-section of the proposed alternative engineered barrier:

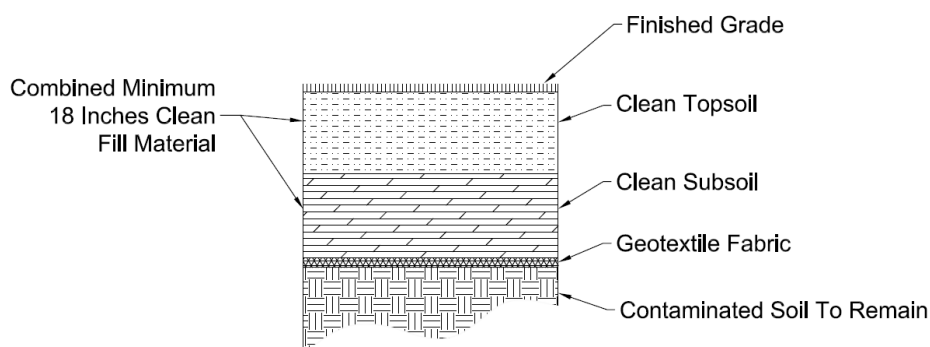


Figure 1. Alternative Engineered Barrier Cross-Section

All imported fill material used for engineered barriers will meet the requirements of 35 IAC 742 Subpart K. All imported soil will be verified to meet Tier 1 residential SROs for the analytes listed in 35 IAC 740, Appendix A. Each type of soil utilized for engineered barriers will be sampled and analyzed at a rate of one sample per 500 cubic yards of imported material. Aggregate materials obtained from a virgin quarry do not need to be sampled but will require a quarry letter stating that the material is a virgin source. Imported fill will be screened as it arrives onsite to ensure that it is consistent with the approved source material.

1.3.1 Geotextile Fabric

Geotextile material used in the proposed alternate barrier will feature sufficient properties to maintain the integrity of the barrier. The geotextile fabric will meet or exceed the product specifications listed in **Table A**, below:

Table A – Minimum Geotextile Fabric Specifications

Tested Property	Test Method	Frequency	Minimum Average Roll Value
Grab Tensile Strength, lbs	ASTM D4632	90,000 ft ² (8,300 m ²)	120
Grab Elongation, %	ASTM D4632	90,000 ft ² (8,300 m ²)	50

Table A – Minimum Geotextile Fabric Specifications

Tested Property	Test Method	Frequency	Minimum Average Roll Value
Trapezoidal Tear Strength, lbs	ASTM D4533	90,000 ft ² (8,300 m ²)	50
CBR Puncture Strength, lbs	ASTM D6241	540,000 ft ² (50,000 m ²)	310
Permittivity, sec ⁻¹	ASTM D4491	540,000 ft ² (50,000 m ²)	1.7
Water Flow Rate, Gal/min/ft ² (L/min/m ²)	ASTM D4491	540,000 ft ² (50,000 m ²)	135
UV Resistance, % retained after 500 hours	ASTM D4355	Per formulation	70
Apparent Opening Size, Sieve No. (mm)	ASTM D4751	540,000 ft ² (50,000 m ²)	80 (0.177)
Mass per Unit Area, oz/yd ² (g/m ²)	ASTM D5261	90,000 ft ² (8,300 m ²)	8 (271.2)

Samples of geotextile fabric meeting these requirements have been provided to the IEPA with this report for evaluation. An alternative engineered barrier memorandum including a table summarizing the highest concentrations of each residential ingestion COCs to remain beneath the alternative barriers, manufacturer specifications of the geotextile and an Engineered Barrier Site Map is included as **Appendix A**.

1.4 Water Management

During soil excavation and site development activities, any groundwater, rainwater, or other surface water runoff that may be encountered will be visually inspected for evidence of contamination, such as discoloration or sheen. The water will be properly characterized and disposed of in accordance with applicable local, state, and federal regulations. This activity may include the temporary storage of water at the Remediation Site until proper characterization and disposal authorizations are acquired from the appropriate authorities.

1.5 UST Removal

Underground storage tank(s) (UST(s)), if encountered during redevelopment, will be removed. For all UST removal activities, appropriate permits will be obtained, and the UST(s) will be removed in accordance with all applicable federal, state and local regulations. UST removal activities will be documented in the RACR.

Should a Leaking UST (LUST) incident be determined at the Remediation Site, the UST will be removed and limited soils surrounding and below the UST will be excavated as necessary. Pursuant to 35 IAC 734.210(h), confirmation soil samples will be collected for laboratory analysis. One sample will be collected for every 20 feet of wall length. One sample will be taken from the excavation floor beneath each tank with a capacity of less than 1,000 gallons; two samples will be taken beneath each tank with a capacity of more than 1,000 gallons. The soil samples will be analyzed for the applicable indicator contaminants per 35 IAC 734 Appendix A and compared to Tier 1 SROs. Any exceedances will be addressed per 35 IAC 742 and documented in the RACR.

Additionally, any required regulatory reporting under LUST regulations will be addressed separately, as warranted.

1.6 Institutional Controls

Institutional controls that will be enacted at the Remediation Site consist of the following:

All engineered barriers at the Remediation Site must be properly maintained pursuant to 35 IAC 742.1100(d).

The construction worker caution area depicted on **Exhibit VI** must be designated at the Remediation Site during all remediation/redevelopment activities. A site-specific health and safety plan will be required for this project as well as any future construction activities at the Remediation Site.

In accordance with the City of Chicago groundwater ordinance, no potable water wells shall be installed at the Remediation Site.

Notification of the potential migration of contamination onto off-site properties will be provided to downgradient property owners.

Building(s) constructed at the Remediation Site must feature slab-on-grade construction or a basement with full concrete floor and walls and cannot feature a sump exposed to the subsurface.

Incorporation of these institutional controls into the No Further Remediation (NFR) letter for the Remediation Site will protect continued residential and construction worker populations.

1.7 Remedial Action Plan Summary

Based on the remediation objectives determination contained within the conditionally approved CSI/ROR dated July 23rd, 2019, the applicable exposure pathways have been addressed through the exposure route evaluation, in accordance with 35 IAC 742 Subpart C. The remedial action plan will attain the remedial objectives for the Remediation Site through limited soil excavation and off-site disposal, installation of engineered barriers, and utilization of institutional controls. The following is a tentative schedule for the remediation activities for each planned phase of work:

- Excavation/Construction: Summer 2024
- Installation of Engineered Barriers: Summer 2024

The schedule will be revised, as needed, to adjust for permitting, excavation delays, funding delays, and/or other changes.

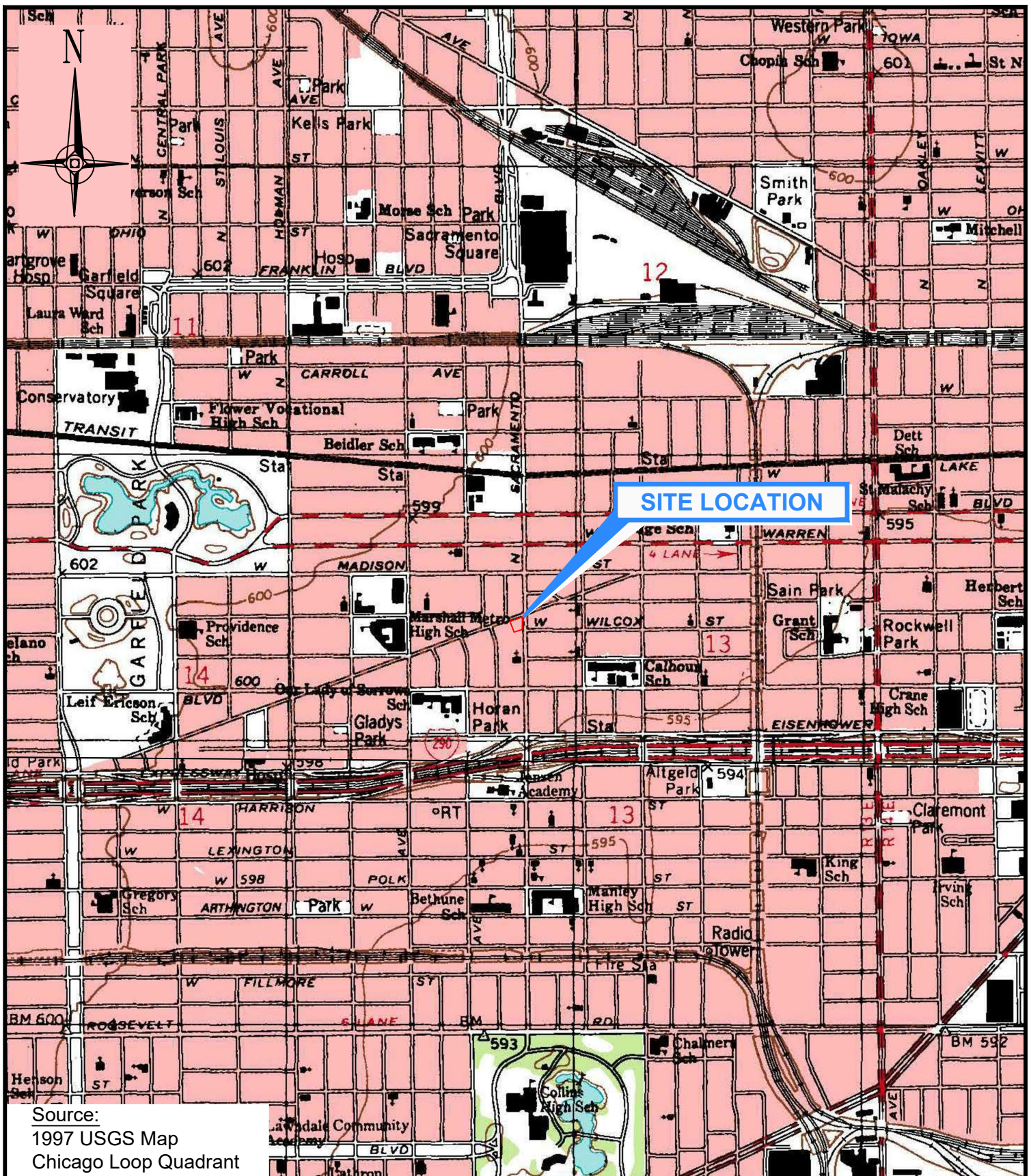
All remediation activities will be documented and provided in the RACR. Soil and water that require removal as part of remediation activities will be properly characterized and disposed of in accordance with applicable local, state, and federal regulations. Upon completion of the project, institutional controls in the form of NFR letters will be enacted to require the maintenance of engineered barriers and implementation of site-specific worker safety precautions for future construction activities. Upon completion of the proposed remediation activities, in accordance with the RAP, all potential exposure routes at the Remediation Site will be excluded from further consideration in accordance with 35 IAC 742.

Carnow Conibear, on behalf of the City of Chicago Department of Assets, Information and Services (AIS), requests that the IEPA approve the RAP for the Remediation Site. Should the

IEPA have comments, clarifications or require additional data, we request that the IEPA consider granting conditional approval of the RAP while these issues are addressed.

EXHIBITS

Exhibit I	Site Location Map
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Exhibit IV(b)	Tier 1 SRO Exceedances – Construction Worker Soil Inhalation Naphthalene
Exhibit V	Engineered Barrier Map
Exhibit VI	Construction Worker Caution Area



Source:
 1997 USGS Map
 Chicago Loop Quadrant

Date: December 2023
 Scale: 1"=1,500'
 Drawn by: LT
 Checked by: DSB

Exhibit I: Site Location Map
 3001-13 W. Fifth Avenue
 Chicago, Illinois 60612

Your Environmental Resource

T:\AIS\2021 SE Zone Phase I&II&ESA, SRP and Oversight\3001-3013 W 5th Ave\SRP\GIS\ORRAP\Drawings\Chicago Reference

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**CARNOW
 CONIBEAR**



SB-8		
Depth	COC	(mg/kg)
0-3	Arsenic	3.7
	Lead	33
6-9	Arsenic	5.6
	Lead	160
9-12	Arsenic	NA
	Lead	140
12-15	Arsenic	NA
	Lead	16

SB-6		
Depth	COC	(mg/kg)
0-3	Arsenic	9.9
	Lead	18
3-6	Arsenic	13
	Lead	430
6-9	Arsenic	NA
	Lead	23

SB-7		
Depth	COC	(mg/kg)
0-3	Arsenic	5.2
	Lead	290
6-9	Arsenic	27
	Lead	18
9-12	Arsenic	9.6
	Lead	NA

SB-1		
Depth	COC	(mg/kg)
0-3	Arsenic	7.4
	Lead	1100
3-6	Arsenic	10
	Lead	23
6-9	Arsenic	NA
	Lead	NA

B-111		
Depth	COC	(mg/kg)
1-3	Arsenic	6.4
	Lead	130
5-7	Arsenic	6.3
	Lead	22

SB-2		
Depth	COC	(mg/kg)
0-3	Arsenic	3
	Lead	15
3-6	Arsenic	6
	Lead	530
6-9	Arsenic	NA
	Lead	17

SB-9		
Depth	COC	(mg/kg)
0-3	Arsenic	24
	Lead	830
3-6	Arsenic	16
	Lead	23
6-9	Arsenic	5.9
	Lead	NA

SB-3		
Depth	COC	(mg/kg)
0-3	Arsenic	NA
	Lead	NA
3-6	Arsenic	13
	Lead	330
6-9	Arsenic	11
	Lead	20
9-12	Arsenic	NA
	Lead	NA

B-112		
Depth	COC	(mg/kg)
1-3	Arsenic	41
	Lead	1300
5-7	Arsenic	11
	Lead	17

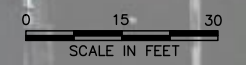
B-112A		
Depth	COC	(mg/kg)
1-3	Arsenic	NA
	Lead	NA
5-7	Arsenic	NA
	Lead	NA

SB-5		
Depth	COC	(mg/kg)
0-3	Arsenic	6.9
	Lead	170
6-9	Arsenic	11
	Lead	19

B-113		
Depth	COC	(mg/kg)
1-3	Arsenic	9.3
	Lead	14
5-7	Arsenic	7.6
	Lead	16

SB-10		
Depth	COC	(mg/kg)
0-3	Arsenic	8
	Lead	420
3-6	Arsenic	7.5
	Lead	1300
6-9	Arsenic	NA
	Lead	20

SB-4		
Depth	COC	(mg/kg)
0-3	Arsenic	25
	Lead	2000
3-6	Arsenic	13
	Lead	120
6-9	Arsenic	NA
	Lead	18



Date: January 2024
 Scale: 1"=30'
 Drawn by: LT
 Checked by: DSB

- LEGEND**
- ▬ Remediation Site Boundary
 - ▬ PIN 16-13-115-009 Boundary
 - B-100 CCA Soil Borings
 - MW-100 CCA Permanent Monitoring Well
 - SB-# 2018 Soil Borings
 - TMW-# 2018 Temporary Monitoring Wells

Soil Boring		
Depth	COC	(mg/kg)
Tier 1 SROs		
COC		(mg/kg)
Arsenic		13
Lead		400

Estimated Extent of Soils Exceeding Tier 1 SRO

[Shaded] = Soil Sample Exceeding Tier 1 Soil Remediation Objective (SRO)

Notes:
 1. COC= Contaminant of Concern
 2. Tier 1 SROs have been adjusted for 2022 95th percentile background concentrations, as applicable.
 3. All depths provided in feet below ground surface (bgs)

Exhibit II(a): Tier 1 SRO Exceedances
Residential Soil Ingestion - Arsenic & Lead
 3001-13 W. Fifth Avenue
 Chicago, Illinois 60612

Carnow, Conibear & Assoc., Ltd.
 Environmental Consulting Services
 600 W. Van Buren St., Suite 500, Chicago, IL 60607
 t: 312.782.4486 f: 312.782.5145
 www.ccaltd.com



B-111		
Depth	COC	(mg/kg)
1-3	Benz(a)anthracene	2.4
	Benzo(a)pyrene	2.7
	Benzo(b)fluoranthene	2
	Benzo(k)fluoranthene	2.1
	Dibenzo(a,h)anthracene	0.72
5-7	Indeno(1,2,3-c,d)pyrene	1.2
	Benz(a)anthracene	<0.044
	Benzo(a)pyrene	<0.044
	Indeno(1,2,3-c,d)pyrene	<0.044

SB-8		
Depth	COC	(mg/kg)
0-3	Benz(a)anthracene	0.22
	Benzo(a)pyrene	0.24
	Benzo(b)fluoranthene	0.27
	Benzo(k)fluoranthene	0.18
	Dibenzo(a,h)anthracene	<0.037
6-9	Indeno(1,2,3-c,d)pyrene	0.14
	Benz(a)anthracene	2.2
	Benzo(a)pyrene	1.8
	Benzo(b)fluoranthene	2
9-12	Benzo(k)fluoranthene	1.1
	Dibenzo(a,h)anthracene	0.59
	Indeno(1,2,3-c,d)pyrene	0.92
	Indeno(1,2,3-c,d)pyrene	0.95

SB-6		
Depth	COC	(mg/kg)
0-3	Benz(a)anthracene	<0.35
	Benzo(a)pyrene	<0.35
	Benzo(b)fluoranthene	<0.35
	Benzo(k)fluoranthene	<0.35
	Dibenzo(a,h)anthracene	<0.35
3-6	Indeno(1,2,3-c,d)pyrene	<0.35
	Benz(a)anthracene	0.77
	Benzo(a)pyrene	0.76
	Benzo(b)fluoranthene	0.7
6-9	Benzo(k)fluoranthene	0.66
	Dibenzo(a,h)anthracene	0.24
	Indeno(1,2,3-c,d)pyrene	0.43
	Indeno(1,2,3-c,d)pyrene	<0.041

SB-7		
Depth	COC	(mg/kg)
0-3	Benz(a)anthracene	4.2
	Benzo(a)pyrene	3
	Benzo(b)fluoranthene	2
	Benzo(k)fluoranthene	2.2
	Dibenzo(a,h)anthracene	0.89
6-9	Indeno(1,2,3-c,d)pyrene	1.3
	Benz(a)anthracene	<0.041
	Benzo(a)pyrene	<0.041
	Benzo(b)fluoranthene	<0.041

SB-1		
Depth	COC	(mg/kg)
0-3	Benz(a)anthracene	0.59
	Benzo(a)pyrene	0.44
	Benzo(b)fluoranthene	0.49
	Benzo(k)fluoranthene	0.36
	Dibenzo(a,h)anthracene	0.17
3-6	Indeno(1,2,3-c,d)pyrene	0.25
	Benz(a)anthracene	<0.039
	Benzo(a)pyrene	<0.039
	Benzo(b)fluoranthene	<0.039

SB-2		
Depth	COC	(mg/kg)
0-3	Benz(a)anthracene	0.076
	Benzo(a)pyrene	0.082
	Benzo(b)fluoranthene	0.07
	Benzo(k)fluoranthene	0.071
	Dibenzo(a,h)anthracene	<0.035
3-6	Indeno(1,2,3-c,d)pyrene	0.057
	Benz(a)anthracene	4.1
	Benzo(a)pyrene	4
	Benzo(b)fluoranthene	3.8
6-9	Benzo(k)fluoranthene	2.9
	Dibenzo(a,h)anthracene	1.1
	Indeno(1,2,3-c,d)pyrene	2
	Benz(a)anthracene	<0.041

SB-9		
Depth	COC	(mg/kg)
0-3	Benz(a)anthracene	1.5
	Benzo(a)pyrene	1.6
	Benzo(b)fluoranthene	1.3
	Benzo(k)fluoranthene	1.2
	Dibenzo(a,h)anthracene	0.44
3-6	Indeno(1,2,3-c,d)pyrene	0.76
	Benz(a)anthracene	<0.040
	Benzo(a)pyrene	<0.040
	Benzo(b)fluoranthene	<0.040

SB-10		
Depth	COC	(mg/kg)
0-3	Benz(a)anthracene	1.5
	Benzo(a)pyrene	1.5
	Benzo(b)fluoranthene	1.4
	Benzo(k)fluoranthene	1.3
	Dibenzo(a,h)anthracene	0.45
3-6	Indeno(1,2,3-c,d)pyrene	0.82
	Benz(a)anthracene	55
	Benzo(a)pyrene	52
	Benzo(b)fluoranthene	38
6-9	Benzo(k)fluoranthene	43
	Dibenzo(a,h)anthracene	<0.50
	Indeno(1,2,3-c,d)pyrene	25
	Benz(a)anthracene	<0.041

B-113		
Depth	COC	(mg/kg)
1-3	Benz(a)anthracene	<0.040
	Benzo(a)pyrene	<0.040
	Benzo(b)fluoranthene	<0.040
	Benzo(k)fluoranthene	<0.040
	Dibenzo(a,h)anthracene	<0.040
5-7	Indeno(1,2,3-c,d)pyrene	<0.040
	Benz(a)anthracene	<0.040
	Benzo(a)pyrene	<0.040
	Benzo(b)fluoranthene	<0.040

B-112		
Depth	COC	(mg/kg)
1-3	Benz(a)anthracene	18
	Benzo(a)pyrene	19
	Benzo(b)fluoranthene	15
	Benzo(k)fluoranthene	13
	Dibenzo(a,h)anthracene	5.2
5-7	Indeno(1,2,3-c,d)pyrene	9.5
	Benz(a)anthracene	<0.041
	Benzo(a)pyrene	<0.041
	Benzo(b)fluoranthene	<0.041

B-112A		
Depth	COC	(mg/kg)
1-3	Benz(a)anthracene	NA
	Benzo(a)pyrene	NA
	Benzo(b)fluoranthene	NA
	Benzo(k)fluoranthene	NA
	Dibenzo(a,h)anthracene	NA
5-7	Indeno(1,2,3-c,d)pyrene	NA
	Benz(a)anthracene	NA
	Benzo(a)pyrene	NA
	Benzo(b)fluoranthene	NA

SB-4		
Depth	COC	(mg/kg)
0-3	Benz(a)anthracene	34
	Benzo(a)pyrene	32
	Benzo(b)fluoranthene	36
	Benzo(k)fluoranthene	27
	Dibenzo(a,h)anthracene	11
3-6	Indeno(1,2,3-c,d)pyrene	21
	Benz(a)anthracene	4.2
	Benzo(a)pyrene	3.6
	Benzo(b)fluoranthene	3.2
6-9	Benzo(k)fluoranthene	3.1
	Dibenzo(a,h)anthracene	1.1
	Indeno(1,2,3-c,d)pyrene	1.8
	Benz(a)anthracene	0.83

SB-3		
Depth	COC	(mg/kg)
6-9	Benz(a)anthracene	<0.041
	Benzo(a)pyrene	<0.041
	Benzo(b)fluoranthene	<0.041
	Benzo(k)fluoranthene	<0.041

SB-5		
Depth	COC	(mg/kg)
0-3	Benz(a)anthracene	7.7
	Benzo(a)pyrene	6.2
	Benzo(b)fluoranthene	5.8
	Benzo(k)fluoranthene	5.2
	Dibenzo(a,h)anthracene	2.1
6-9	Indeno(1,2,3-c,d)pyrene	3.8
	Benz(a)anthracene	<0.041
	Benzo(a)pyrene	<0.041
	Benzo(b)fluoranthene	<0.041

Date: January 2024
 Scale: 1"=30'
 Drawn by: LT
 Checked by: DSB

- LEGEND**
- ▬ Remediation Site Boundary
 - ▬ PIN 16-13-115-009 Boundary
 - ⊕ CCA Soil Borings
 - ⊕ MW-100 CCA Permanent Monitoring Well
 - ⊕ SB-# 2018 Soil Borings
 - ⊕ TMW-# 2018 Temporary Monitoring Wells

Soil Boring		
Depth	COC	(mg/kg)
Tier 1 SROs		
	COC	(mg/kg)
	Benz(a)anthracene	11
	Benzo(a)pyrene	11
	Benzo(b)fluoranthene	13
	Benzo(k)fluoranthene	9.0
	Dibenzo(a,h)anthracene	1
	Indeno(1,2,3-c,d)pyrene	5.8

▨ Estimated Extent of Soils Exceeding Tier 1 SRO

[Shaded] = Soil Sample Exceeding Tier 1 Soil Remediation Objective (SRO)

Notes:
 1. COC= Contaminant of Concern
 2. Tier 1 SROs have been adjusted for 2022 95th percentile background concentrations, as applicable.
 3. All depths provided in feet below ground surface (bgs)

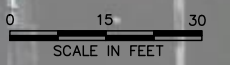
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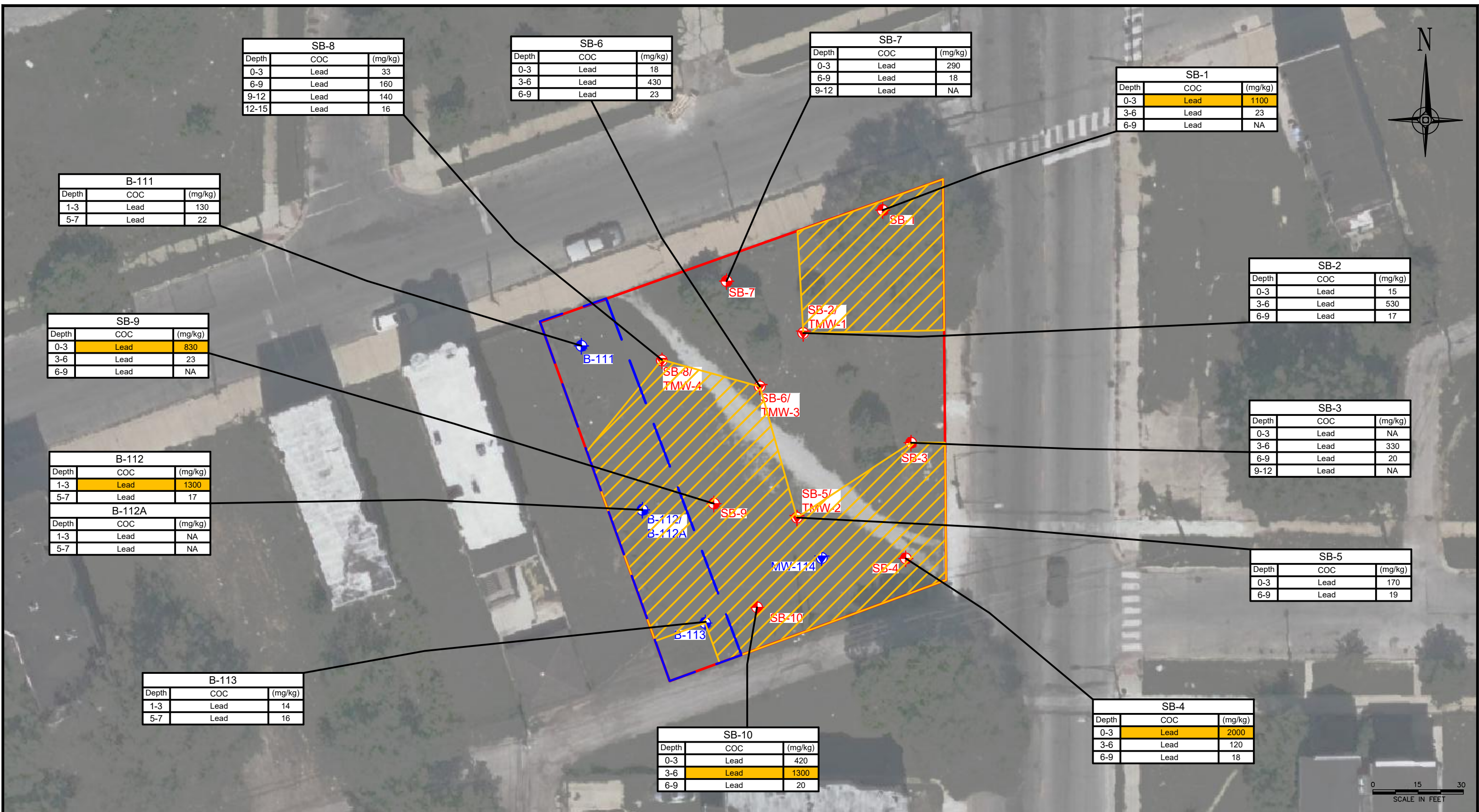
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Exhibit II(b): Tier 1 SRO Exceedances Residential Soil Ingestion - PNAs
 3001-13 W. Fifth Avenue
 Chicago, Illinois 60612

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SB-8		
Depth	COC	(mg/kg)
0-3	Lead	33
6-9	Lead	160
9-12	Lead	140
12-15	Lead	16

SB-6		
Depth	COC	(mg/kg)
0-3	Lead	18
3-6	Lead	430
6-9	Lead	23

SB-7		
Depth	COC	(mg/kg)
0-3	Lead	290
6-9	Lead	18
9-12	Lead	NA

SB-1		
Depth	COC	(mg/kg)
0-3	Lead	1100
3-6	Lead	23
6-9	Lead	NA

B-111		
Depth	COC	(mg/kg)
1-3	Lead	130
5-7	Lead	22

SB-2		
Depth	COC	(mg/kg)
0-3	Lead	15
3-6	Lead	530
6-9	Lead	17

SB-9		
Depth	COC	(mg/kg)
0-3	Lead	830
3-6	Lead	23
6-9	Lead	NA

SB-3		
Depth	COC	(mg/kg)
0-3	Lead	NA
3-6	Lead	330
6-9	Lead	20
9-12	Lead	NA

B-112		
Depth	COC	(mg/kg)
1-3	Lead	1300
5-7	Lead	17

B-112A		
Depth	COC	(mg/kg)
1-3	Lead	NA
5-7	Lead	NA

SB-5		
Depth	COC	(mg/kg)
0-3	Lead	170
6-9	Lead	19

B-113		
Depth	COC	(mg/kg)
1-3	Lead	14
5-7	Lead	16

SB-10		
Depth	COC	(mg/kg)
0-3	Lead	420
3-6	Lead	1300
6-9	Lead	20

SB-4		
Depth	COC	(mg/kg)
0-3	Lead	2000
3-6	Lead	120
6-9	Lead	18

Date: January 2024
 Scale: 1"=30'
 Drawn by: LT
 Checked by: DSB

- LEGEND**
- Remediation Site Boundary
 - PIN 16-13-115-009 Boundary
 - B-100 CCA Soil Borings
 - MW-100 CCA Permanent Monitoring Well
 - SB-# 2018 Soil Borings
 - TMW-# 2018 Temporary Monitoring Wells

Soil Boring		
Depth	COC	(mg/kg)

Tier 1 SROs	
COC	(mg/kg)
Lead	700

Estimated Extent of Soils Exceeding Tier 1 SRO

[Shaded] = Soil Sample Exceeding Tier 1 Soil Remediation Objective (SRO)

Notes:
 1. COC= Contaminant of Concern
 2. Tier 1 SROs have been adjusted for 2022 95th percentile background concentrations, as applicable.
 3. All depths provided in feet below ground surface (bgs)

Exhibit III(a): Tier 1 SRO Exceedances
Construction Worker Soil Ingestion - Lead
 3001-13 W. Fifth Avenue
 Chicago, Illinois 60612

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SB-8		
Depth	COC	(mg/kg)
0-3	Benzo(a)pyrene	0.24
6-9	Benzo(a)pyrene	1.8
9-12	Benzo(a)pyrene	0.9
12-15	Benzo(a)pyrene	NA

SB-6		
Depth	COC	(mg/kg)
0-3	Benzo(a)pyrene	<0.35
3-6	Benzo(a)pyrene	0.76
6-9	Benzo(a)pyrene	<0.041

SB-7		
Depth	COC	(mg/kg)
0-3	Benzo(a)pyrene	3
6-9	Benzo(a)pyrene	<0.041
9-12	Benzo(a)pyrene	NA

SB-1		
Depth	COC	(mg/kg)
0-3	Benzo(a)pyrene	0.44
3-6	Benzo(a)pyrene	<0.039
6-9	Benzo(a)pyrene	NA

B-111		
Depth	COC	(mg/kg)
1-3	Benzo(a)pyrene	2.7
5-7	Benzo(a)pyrene	<0.044

SB-2		
Depth	COC	(mg/kg)
0-3	Benzo(a)pyrene	0.082
3-6	Benzo(a)pyrene	4
6-9	Benzo(a)pyrene	<0.041

SB-9		
Depth	COC	(mg/kg)
0-3	Benzo(a)pyrene	1.6
3-6	Benzo(a)pyrene	<0.040
6-9	Benzo(a)pyrene	NA

SB-3		
Depth	COC	(mg/kg)
0-3	Benzo(a)pyrene	NA
3-6	Benzo(a)pyrene	NA
6-9	Benzo(a)pyrene	<0.041
9-12	Benzo(a)pyrene	NA

B-112		
Depth	COC	(mg/kg)
1-3	Benzo(a)pyrene	19
5-7	Benzo(a)pyrene	<0.041

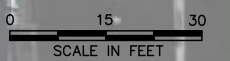
B-112A		
Depth	COC	(mg/kg)
1-3	Benzo(a)pyrene	NA
5-7	Benzo(a)pyrene	NA

SB-5		
Depth	COC	(mg/kg)
0-3	Benzo(a)pyrene	6.2
6-9	Benzo(a)pyrene	<0.041

B-113		
Depth	COC	(mg/kg)
1-3	Benzo(a)pyrene	<0.040
5-7	Benzo(a)pyrene	<0.040

SB-10		
Depth	COC	(mg/kg)
0-3	Benzo(a)pyrene	1.5
3-6	Benzo(a)pyrene	52
6-9	Benzo(a)pyrene	<0.041

SB-4		
Depth	COC	(mg/kg)
0-3	Benzo(a)pyrene	32
3-6	Benzo(a)pyrene	3.6
6-9	Benzo(a)pyrene	0.68



Date: January 2024
 Scale: 1"=30'
 Drawn by: LT
 Checked by: DSB

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- LEGEND**
- Remediation Site Boundary
 - PIN 16-13-115-009 Boundary
 - B-100 CCA Soil Borings
 - MW-100 CCA Permanent Monitoring Well
 - SB-# 2018 Soil Borings
 - TMW-# 2018 Temporary Monitoring Wells

Soil Boring		
Depth	COC	(mg/kg)
	Benzo(a)pyrene	17

Tier 1 SROs	
COC	(mg/kg)
Benzo(a)pyrene	17

Estimated Extent of Soils Exceeding Tier 1 SRO

[Shaded] = Soil Sample Exceeding Tier 1 Soil Remediation Objective (SRO)

- Notes:
- COC= Contaminant of Concern
 - Tier 1 SROs have been adjusted for 2022 95th percentile background concentrations, as applicable.
 - All depths provided in feet below ground surface (bgs)

Exhibit III(b): Tier 1 SRO Exceedances
Construction Worker Soil Ingestion - Benzo(a)pyrene
 3001-13 W. Fifth Avenue
 Chicago, Illinois 60612

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SB-8		
Depth	COC	(mg/kg)
0-3	Mercury	0.044
6-9	Mercury	0.2
9-12	Mercury	0.29
12-15	Mercury	<0.024

SB-6		
Depth	COC	(mg/kg)
0-3	Mercury	0.028
3-6	Mercury	0.33
6-9	Mercury	0.024

SB-7		
Depth	COC	(mg/kg)
0-3	Mercury	0.25
6-9	Mercury	<0.023
9-12	Mercury	NA

SB-1		
Depth	COC	(mg/kg)
0-3	Mercury	2.2
3-6	Mercury	0.034
6-9	Mercury	NA

B-111		
Depth	COC	(mg/kg)
1-3	Mercury	0.28
5-7	Mercury	0.029

SB-2		
Depth	COC	(mg/kg)
0-3	Mercury	<0.020
3-6	Mercury	0.35
6-9	Mercury	0.026

SB-9		
Depth	COC	(mg/kg)
0-3	Mercury	0.39
3-6	Mercury	0.054
6-9	Mercury	NA

SB-3		
Depth	COC	(mg/kg)
0-3	Mercury	NA
3-6	Mercury	0.17
6-9	Mercury	0.025
9-12	Mercury	NA

B-112		
Depth	COC	(mg/kg)
1-3	Mercury	0.48
5-7	Mercury	0.029

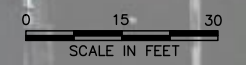
B-112A		
Depth	COC	(mg/kg)
1-3	Mercury	NA
5-7	Mercury	NA

SB-5		
Depth	COC	(mg/kg)
0-3	Mercury	0.15
6-9	Mercury	0.031

B-113		
Depth	COC	(mg/kg)
1-3	Mercury	0.025
5-7	Mercury	0.023

SB-10		
Depth	COC	(mg/kg)
0-3	Mercury	0.35
3-6	Mercury	0.41
6-9	Mercury	<0.023

SB-4		
Depth	COC	(mg/kg)
0-3	Mercury	0.38
3-6	Mercury	0.045
6-9	Mercury	NA



Date: January 2024
 Scale: 1"=30'
 Drawn by: LT
 Checked by: DSB

- LEGEND**
- Remediation Site Boundary
 - PIN 16-13-115-009 Boundary
 - B-100 CCA Soil Borings
 - MW-100 CCA Permanent Monitoring Well
 - SB-# 2018 Soil Borings
 - TMW-# 2018 Temporary Monitoring Wells

Soil Boring		
Depth	COC	(mg/kg)
0-3	Mercury	0.10

Tier 1 SROs		
COC	(mg/kg)	
Mercury	0.10	

Estimated Extent of Soils Exceeding Tier 1 SRO

[Shaded] = Soil Sample Exceeding Tier 1 Soil Remediation Objective (SRO)

Notes:
 1. COC= Contaminant of Concern
 2. Tier 1 SROs have been adjusted for 2022 95th percentile background concentrations, as applicable.
 3. All depths provided in feet below ground surface (bgs).

Exhibit IV(a): Tier 1 SRO Exceedances
Construction Worker Soil Inhalation - Mercury
 3001-13 W. Fifth Avenue
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SB-8		
Depth	COC	(mg/kg)
0-3	Naphthalene	<0.037
6-9	Naphthalene	0.047
9-12	Naphthalene	<0.041
12-15	Naphthalene	NA

SB-6		
Depth	COC	(mg/kg)
0-3	Naphthalene	<0.35
3-6	Naphthalene	<0.039
6-9	Naphthalene	<0.041

SB-7		
Depth	COC	(mg/kg)
0-3	Naphthalene	<0.042
6-9	Naphthalene	<0.041
9-12	Naphthalene	NA

SB-1		
Depth	COC	(mg/kg)
0-3	Naphthalene	0.082
3-6	Naphthalene	<0.039
6-9	Naphthalene	NA

B-111		
Depth	COC	(mg/kg)
1-3	Naphthalene	0.13
5-7	Naphthalene	<0.044

SB-2		
Depth	COC	(mg/kg)
0-3	Naphthalene	<0.035
3-6	Naphthalene	0.11
6-9	Naphthalene	<0.041

SB-9		
Depth	COC	(mg/kg)
0-3	Naphthalene	0.23
3-6	Naphthalene	<0.040
6-9	Naphthalene	NA

SB-3		
Depth	COC	(mg/kg)
0-3	Naphthalene	NA
3-6	Naphthalene	NA
6-9	Naphthalene	<0.041
9-12	Naphthalene	NA

B-112		
Depth	COC	(mg/kg)
1-3	Naphthalene	3.5
5-7	Naphthalene	<0.041

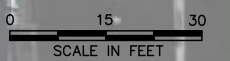
B-112A		
Depth	COC	(mg/kg)
1-3	Naphthalene	NA
5-7	Naphthalene	NA

SB-5		
Depth	COC	(mg/kg)
0-3	Naphthalene	0.067
6-9	Naphthalene	<0.041

B-113		
Depth	COC	(mg/kg)
1-3	Naphthalene	<0.040
5-7	Naphthalene	<0.040

SB-10		
Depth	COC	(mg/kg)
0-3	Naphthalene	<0.041
3-6	Naphthalene	5.4
6-9	Naphthalene	<0.041

SB-4		
Depth	COC	(mg/kg)
0-3	Naphthalene	0.48
3-6	Naphthalene	1.4
6-9	Naphthalene	0.45



Date: January 2024
 Scale: 1"=30'
 Drawn by: LT
 Checked by: DSB

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- LEGEND**
- Remediation Site Boundary
 - PIN 16-13-115-009 Boundary
 - B-100 CCA Soil Borings
 - MW-100 CCA Permanent Monitoring Well
 - SB-# 2018 Soil Borings
 - TMW-# 2018 Temporary Monitoring Wells

Soil Boring		
Depth	COC	(mg/kg)
	Naphthalene	1.8

Estimated Extent of Soils Exceeding Tier 1 SRO

[Shaded] = Soil Sample Exceeding Tier 1 Soil Remediation Objective (SRO)

- Notes:
- COC= Contaminant of Concern
 - Tier 1 SROs have been adjusted for 2022 95th percentile background concentrations, as applicable.
 - All depths provided in feet below ground surface (bgs)

Exhibit IV(b): Tier 1 SRO Exceedances
Construction Worker Soil Inhalation - Naphthalene
 3001-13 W. Fifth Avenue
 Chicago, Illinois 60612

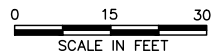
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W. 5th Avenue

S. Sacramento Blvd.

Alleyway



-  Minimum 3' Clean Fill
-  18" Alternative Barrier underlain with Geotextile
-  Concrete

Date: January 2024
 Scale: 1"=30'
 Drawn by: LT
 Checked by: DSB







LEGEND	
	Site Boundary
	PIN 16-13-115-009 Boundary
B-100 	CCA Soil Borings
MW-100 	CCA Permanent Monitoring Well
SB-# 	2018 Soil Borings
TMW-# 	2018 Temporary Monitoring Wells

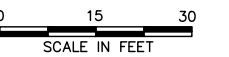
Exhibit V: Engineered Barrier Map
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 Chicago, Illinois 60612

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Date: January 2024
 Scale: 1"=30'
 Drawn by: LT
 Checked by: DSB

LEGEND	
	Site Boundary
	PIN 16-13-115-009 Boundary
	CCA Soil Borings
	CCA Permanent Monitoring Well
	2018 Soil Borings
	2018 Temporary Monitoring Wells
	Construction Worker Cauton Area

Exhibit VI: Construction Worker Cauton Area
 3001-13 W. Fifth Avenue
 Chicago, Illinois 60612

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APPENDIX A

Alternative Engineered Barrier Memorandum

Alternative Engineered Barrier Memorandum

DATE: January 31, 2024

TO: Jeron Schultz, Section Manager

FROM: Carnow, Conibear, and Assoc., Ltd.

SUBJECT: Request for Alternate Barrier Approval

REFER TO: 0316275397/Cook County
Chicago/Resilient Corridor Fifth Avenue Eco Orchard – Southern Parcel
Site Remediation/Technical Reports

Site Description: Proposed redevelopment plans consist of a storm water detention – green space along Fifth Avenue consisting of paved and landscaped areas throughout the Remediation Site.

Site History: The Remediation Site was developed by residential and commercial properties from at least 1896 to at least 1999, which consisted of a doctor's office, a medicine company, a coal storage company, the American Casting Service, a grocery store, a drug store, a pharmacy, a barber, a drycleaner, and a tavern. After this time, the Remediation Site has remained vacant since at least 2002. A 1,000-gallon fuel oil underground storage tank (UST) was associated with 3001 W. Fifth Avenue address.

Areas of Concern:

- Arsenic exceeded the applicable Tier 1 SRO in three surface samples (SB-4, SB-9 and B-112 between 0 and 3 feet below ground surface (bgs)) and two subsurface samples (SB-7 and SB-9 between 3 and 9 feet bgs) in the southern portion of the Remediation Site.
- Lead exceeded the applicable Tier 1 SRO in five surface samples (SB-1, SB-4, SB-9, SB-10, and B-112 between 0 and 3 feet bgs) and three subsurface samples (SB-2, SB-6, and SB-10 between 3 and 6 feet bgs) throughout the Remediation Site, excluding the northwest portion.
- Dibenzo(a,h)anthracene exceeded the applicable Tier 1 SRO in three surface samples (SB-4, SB-5, and B-112 between 0 and 3 feet bgs) and two subsurface samples (SB-2 and SB-4 between 3 and 6 feet bgs) near the north-central and southeast portions of the Remediation Site.
- Indeno(1,2,3-c,d)pyrene exceeded the applicable Tier 1 SRO in two surface samples (SB-4 & B-112 between 0 and 3 feet bgs,) and one subsurface sample (SB-10 between 3 and 6 feet bgs) near the southern and western boundaries of the Remediation Site.
- Benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and benzo(k)fluoranthene exceeded the applicable Tier 1 SRO in two surface samples (SB-4 & B-112 between 0 and 3 feet bgs) and one subsurface sample (SB-10 between 3 to 6 feet bgs) near the southern boundary of the Remediation Site.

Request for Alternative Barriers

The Remediation Applicant is requesting the use of Geotextile (8 oz minimum) and 18 inches of clean fill as an alternative barrier for the Ingestion Pathway. The geotextile will be installed in portions of the landscaped areas and covered with a minimum of 18 inches of clean fill meeting Tier 1 SROs as the alternative engineered barrier to exclude the Tier 1 ingestion exceedances. The minimum of 18 inches of clean fill will be covered by engineering topsoil or clean aggregate, which will be considered part of the alternative engineered barrier.

COCs – Alternate Barrier

Soil Sample ID	Sample Depth (ft)	Identified Contaminant	Detected Concentration (mg/kg)	Exposure Route Exceeded
SB-2	3-6	Dibenzo(a,h)anthracene	1.1	Residential Ingestion
		Lead	530	Residential Ingestion
		Mercury	0.35	Soil Component to Class II Groundwater Ingestion, Construction Worker Inhalation
SB-3	3-6	Cadmium	1.1	Soil Component to Class II Groundwater Ingestion
		Mercury	0.17	Soil Component to Class II Groundwater Ingestion, Construction Worker Inhalation
SB-4	0-3	Benz(a)anthracene	34	Residential Ingestion, Soil Component to Class II Groundwater Ingestion
		Benzo(a)pyrene	32	Residential Ingestion, Construction Worker Ingestion
		Benzo(b)fluoranthene	36	Residential Ingestion, Soil Component to Class II Groundwater Ingestion
		Benzo(k)fluoranthene	27	Residential Ingestion
		Dibenzo(a,h)anthracene	11	Residential Ingestion, Soil Component to Class II Groundwater Ingestion
		Indeno(1,2,3-c,d)pyrene	21	Residential Ingestion
		Arsenic	25	Residential Ingestion
		Lead	2000	Residential Ingestion, Soil Component to Class II Groundwater Ingestion, Construction Worker Ingestion
Mercury	0.38	Construction Worker Inhalation		

	3-6	Dibenzo(a,h)anthracene	1.1	Residential Ingestion
SB-5	0-3	Dibenzo(a,h)anthracene	2.1	Residential Ingestion
		Mercury	0.15	Construction Worker Inhalation
SB-6	3-6	Lead	430	Residential Ingestion
		Mercury	0.33	Construction Worker Inhalation
SB-7	0-3	Mercury	0.25	Construction Worker Inhalation
	6-9	Arsenic	27	Residential Inhalation
SB-9	0-3	Arsenic	24	Residential Ingestion
		Lead	830	Residential Ingestion, Construction Worker Ingestion
		Mercury	0.39	Construction Worker Inhalation
	3-6	Arsenic	16	Residential Ingestion
B-111	1-3	Mercury	0.28	Construction Worker Inhalation
B-112	1-3	Benz(a)anthracene	18	Residential Ingestion, Soil Component to Class II Groundwater Ingestion
		Benzo(a)pyrene	19	Residential Ingestion, Construction Worker Ingestion
		Benzo(b)fluoranthene	15	Residential Ingestion
		Benzo(k)fluoranthene	13	Residential Ingestion
		Dibenzo(a,h)anthracene	5.2	Residential Ingestion
		Carbazole	4.3	Soil Component to Class II Groundwater Ingestion
		Arsenic	41	Residential Ingestion
		Indeno(1,2,3-c,d)pyrene	9.5	Residential Ingestion
		Lead	1300	Residential Ingestion, Construction Worker Ingestion
		Mercury	0.48	Construction Worker Inhalation
		Naphthalene	35	Construction Worker Inhalation

mg/kg = milligrams per kilogram of soil

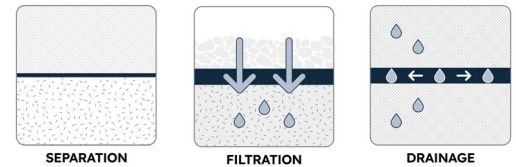
Attachments:

Attachment 1 – Alternative Barrier 8 oz Geotextile Samples (2)

Attachment 2 – Product Specification – Geotextiles (2)

Engineered Barrier Site Map (8.5"x11)

MIRAFI 180N



MIRAFI® 180N is a needlepunched nonwoven geotextile composed of polypropylene fibers, which are formed into a stable network such that the fibers retain their relative position. MIRAFI 180N is inert to biological degradation and resists naturally encountered chemicals, alkalis, and acids. MIRAFI 180N meets AASHTO M288 Class 1, 2, & 3 with elongation >50%.

TenCate Geosynthetics Americas (A Solmax Company) is accredited by Geosynthetic Accreditation Institute – Laboratory Accreditation Program ([GAI-LAP](http://GAI-LAP.com)).

MIRAFI 180N meets Build America, Buy America Act, Pub. L. No. 117-58, div. G §§ 70901-52.

MECHANICAL PROPERTIES	TEST METHOD	UNIT	MINIMUM AVERAGE ROLL VALUE	
			MD	CD
Grab Tensile Strength	ASTM D4632	lbs (N)	205 (912)	205 (912)
Grab Tensile Elongation	ASTM D4632	%	50	50
Trapezoid Tear Strength	ASTM D4533	lbs (N)	80 (356)	80 (356)
CBR Puncture Strength	ASTM D6241	lbs (N)	500 (2224)	
			MAXIMUM OPENING SIZE	
Apparent Opening Size (AOS)	ASTM D4751	U.S. Sieve (mm)	80 (0.18)	
			MINIMUM ROLL VALUE	
Permittivity	ASTM D4491	sec ⁻¹	1.4	
Flow Rate	ASTM D4491	gal/min/ft ² (l/min/m ²)	95 (3870)	
			MINIMUM TEST VALUE	
UV Resistance (at 500 hours)	ASTM D4355	% strength retained	70	
PHYSICAL PROPERTIES	UNIT		ROLL SIZE	
Roll Dimensions (width x length)	ft (m)		12.5 x 360 (3.8 x 110)	15 x 300 (4.57 x 91.4)
Roll Area	yd ² (m ²)		500 (418)	
Roll Weight	lbs (kg)		239 (108)	

365 South Holland Drive Pendergrass, GA 30567

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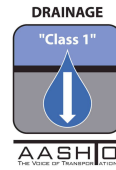
Solmax is not a design or engineering professional and has not performed any such design services to determine if Solmax's goods comply with any project plans or specifications, or with the application or use of Solmax's goods to any particular system, project, purpose, installation, or specification.
FGS000351 ETQR87





US 205NW

Nonwoven Geotextile



NTPEP APPROVED - GTX-2019-01-299. US 205NW is a nonwoven needlepunched geotextile made of 100% polypropylene staple filaments. US 205NW resists ultraviolet and biological deterioration, rotting, naturally encountered basics and acids. Polypropylene is stable within a pH range of 2 to 13. US 205NW will satisfy the requirements as outlined in AASHTO M-288-06 for Class 1 applications and meets the following M.A.R.V. values except where noted:



PROPERTY	TEST METHOD	ENGLISH	METRIC
Weight <input type="checkbox"/> Typical	<u>ASTM D-5261</u>	8 oz/y ²	271.2 g/m ²
Grab Tensile Strength	<u>ASTM D-4632</u>	205 lbs	912 N
Elongation @ Break	<u>ASTM D-4632</u>	50 %	50 %
Mullen Burst ⁽³⁾	<u>ASTM D-3786</u>	350 psi	2,413 kPa
Pin Puncture ⁽³⁾	<u>ASTM D-4833</u>	130 lbs	579 N
CBR Puncture	<u>ASTM D-6241</u>	535 lbs	2,381 N
Trapezoidal Tear	<u>ASTM D-4533</u>	85 lbs	378 N
Apparent Opening Size ^(1,2)	<u>ASTM D-4751</u>	80 US Sieve	0.177 mm
Permittivity ⁽¹⁾	<u>ASTM D-4491</u>	1.4 Sec ⁻¹	1.4 Sec ⁻¹
Water Flow Rate ⁽¹⁾	<u>ASTM D-4491</u>	95 g/min/f ²	3,870 L/min/m ²
UV Resistance @ 500 Hours	<u>ASTM D-4355</u>	70 %	70 %

⁽¹⁾ At the time of manufacturing. Handling, storage, and shipping may change these properties.

⁽²⁾ Maximum average roll value (MaxARV).

⁽³⁾ Historical reference values. These properties are no longer recognized by ASTM or AASHTO for geosynthetics.

US 205NW Shipping & Packaging Information

SIZE	DIAMETER	WIDTH	WEIGHT	AREA	ROLLS PER TRAILER
12.5' x 360'	16"	12.5'	270 lbs	500 y ²	148
15' x 300'	16"	15'	270 lbs	500 y ²	153

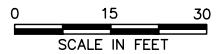
US Fabrics, Inc. | 3904 Virginia Avenue | Cincinnati, OH 45227
Phone: (800) 518-2290 | Fax: (513) 217-4420 | email: info@usfabrics.com




This information is provided for reference only and is not intended as a warranty or guarantee.
 US Fabrics assumes no liability in connection with the use of this information.

W. 5th Avenue





S. Sacramento Blvd.

Alleyway



-  Minimum 3' Clean Fill
-  18" Alternative Barrier underlain with Geotextile
-  Concrete

Date: January 2024
 Scale: 1"=30'
 Drawn by: LT
 Checked by: DSB

LEGEND	
	Site Boundary
	PIN 16-13-115-009 Boundary
B-100 	CCA Soil Borings
MW-100 	CCA Permanent Monitoring Well
SB-# 	2018 Soil Borings
TMW-# 	2018 Temporary Monitoring Wells

Your Environmental Resource

T:\AIS\2021 SE Zone Phase I\IESA, SRP and Oversight\3001-3013 W 5th Ave\SRP\CSIRORRAP\Drawings\3001-13 W Fifth_All Exhibits.dwg

Engineered Barrier Map
 3001-13 W. Fifth Avenue
 Chicago, Illinois 60612

CARNOW CONIBEAR

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