



## Field & Technical Services

200 Third Avenue • Carnegie, PA 15106 • Phone: 412-429-2694 • Fax: 412-279-4512

December 19, 2022

Mr. John Sager  
Wisconsin Department of Natural Resources  
1701 North Fourth Street  
Superior, WI 54880  
Telephone #715-392-7822

**RE: Former Koppers Inc. Facility, Superior Wisconsin  
WDNR DNR BRRTs No: 0216000484  
WDNR Facility ID: 816009810**

**Subject: 2022 On-Property Corrective Measures Monitoring & Maintenance Report**

Dear Mr. Sager:

Field and Technical Services LLC (FTS), on behalf of Beazer East, Inc. (Beazer), and in accordance with the Operation and Maintenance Plan, On-Property Corrective Measures (O&M Plan; Arcadis, revised September 2011), is submitting this On-Property Corrective Measures Annual Monitoring & Maintenance Report for 2022, for the Former Koppers Inc. Facility in Superior, Wisconsin (the Site). This report documents the monitoring and maintenance activities conducted during 2022 for the completed on-property corrective measures (i.e., surface covers and Outfall 001 drainage ditch liner system; Figure 1).

The 2022 monitoring activities included the following:

- Monitoring the two collection sumps beneath the restored Outfall 001 drainage ditch for the presence of dense, non-aqueous phase liquid (DNAPL; performed on October 6, 2022); and
- Visually inspecting the surface covers and Outfall 001 drainage ditch liner system (performed on October 4, 2022).

Table 1 summarizes the DNAPL collection sump monitoring results. As indicated in Table 1, DNAPL has not been detected in either of the collection sumps to date.

The October 4, 2022 inspection observations and photographs are presented in a Site Inspection Form in Attachment 1. No major issues were observed in Areas A, B, F1, F2, G, H, or S or at Outfall 001 drainage ditch during the October 2022 inspection.

*December 19, 2022*

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If you have questions regarding this submittal or require additional information, please call me at (412) 429-2694 or Jane Patarcity of Beazer at (412) 208-8813.

Sincerely,

**Field and Technical Services**

*Angela M Gatchie*

Angela Gatchie  
Project Manager

Attachments

cc: Jane Patarcity, Beazer  
Robert Tatsch, Koppers  
David Bessingpas, Arcadis  
Terry Peterson, TRP

**Table 1**  
**Summary of Outfall 001 Drainage Ditch Sump DNAPL Monitoring/Removal Data <sup>1</sup>**  
**Former Koppers Inc. Facility - Superior, WI**

Date	Depth to Water (ft)	Depth to DNAPL (ft)	Depth to Sump Bottom (ft)	DNAPL Thickness (ft)	DNAPL Volume Removed (gal)	Notes/Comments
<b>East Sump</b>						
1/31/11	11.65	--	20.76	--	--	No DNAPL detected with interface probe or visible on PVC
2/25/11	10.01	--	20.78	--	--	No DNAPL detected with interface probe or visible on PVC; silt on PVC
3/28/11	Not measured - ice present at 11.60 feet below top of riser pipe				--	
4/12/11	12.55	--	20.82	--	--	No DNAPL detected with interface probe or visible on PVC; silt on probe tip
5/19/11	12.80	--	20.78	--	--	No DNAPL detected with interface probe or visible on PVC; silt on probe tip
6/30/11	12.96	--	20.79	--	--	No DNAPL detected with interface probe or visible on PVC; silt on probe tip
9/9/11	13.11	--	20.79	--	--	No DNAPL detected with interface probe or visible on PVC; silt on probe tip
10/21/11	13.20	--	20.85	--	--	No DNAPL detected with interface probe or visible on PVC
6/26/12	13.03	--	21.85 <sup>2</sup>	--	--	No DNAPL detected with interface probe or visible on PVC
9/25/12	13.47	--	20.83	--	--	No DNAPL detected with interface probe or visible on PVC; silt on probe tip
5/1/13	Not measured - ice present at 13.25 feet below top of riser pipe					
8/21/13	13.40	--	20.83	--	--	No DNAPL detected with interface probe or visible on PVC
6/26/14	13.49	--	20.84	--	--	No DNAPL detected with interface probe or visible on PVC; silt on probe tip
7/16/15	13.10	--	20.90	--	--	No DNAPL detected with interface probe or visible on PVC; silt on probe tip
12/06/16	12.46	--	20.82	--	--	No DNAPL detected with interface probe or visible on PVC; silt on probe tip
10/05/17	11.95	--	20.20	--	--	No DNAPL detected with interface probe or visible on PVC; silt on probe tip
10/03/18	13.11	--	20.76	--	--	No DNAPL detected with interface probe or visible on PVC; silt on probe tip
10/16/19	12.20	--	20.76	--	--	No DNAPL detected with interface probe or visible on PVC
10/07/20	13.58	--	20.15	--	--	No DNAPL detected with interface probe or visible on PVC
10/06/21	12.62	--	20.80	--	--	No DNAPL detected with interface probe or visible on PVC
10/06/22	12.45	--	20.38	--	--	No DNAPL detected with interface probe or visible on PVC
<b>West Sump</b>						
1/31/11	10.20	--	20.90	--	--	No DNAPL detected with interface probe or visible on PVC
2/25/11	Not measured - ice present at 10.05 feet below top of riser pipe				--	
3/28/11	Not measured - ice present at 9.50 feet below top of riser pipe				--	
4/12/11	Not measured - ice present at 10.00 feet below top of riser pipe				--	
5/19/11	10.62	--	20.89	--	--	No DNAPL detected with interface probe or visible on PVC
6/30/11	10.75	--	21.54 <sup>2</sup>	--	--	No DNAPL detected with interface probe or visible on PVC
9/9/11	11.05	--	21.54 <sup>2</sup>	--	--	No DNAPL detected with interface probe or visible on PVC
10/21/11	11.07	--	20.93	--	--	No DNAPL detected with interface probe or visible on PVC
6/26/12	10.84	--	20.90	--	--	No DNAPL detected with interface probe or visible on PVC
9/25/12	11.54	--	20.92	--	--	No DNAPL detected with interface probe or visible on PVC
5/1/13	10.23	--	20.91	--	--	No DNAPL detected with interface probe or visible on PVC
8/21/13	11.59	--	20.85	--	--	No DNAPL detected with interface probe or visible on PVC
6/26/14	11.07	--	20.92	--	--	No DNAPL detected with interface probe or visible on PVC
7/16/15	11.21	--	20.94	--	--	No DNAPL detected with interface probe or visible on PVC
12/06/16	11.22	--	20.88	--	--	No DNAPL detected with interface probe or visible on PVC
10/05/17	10.48	--	20.00	--	--	No DNAPL detected with interface probe or visible on PVC
10/03/18	11.89	--	21.62	--	--	No DNAPL detected with interface probe or visible on PVC
10/16/19	11.10	--	20.95	--	--	No DNAPL detected with interface probe or visible on PVC
10/07/20	12.63	--	20.52	--	--	No DNAPL detected with interface probe or visible on PVC
10/06/21	12.31	--	20.43	--	--	No DNAPL detected with interface probe or visible on PVC
10/06/22	12.26	--	20.54	--	--	No DNAPL detected with interface probe or visible on PVC

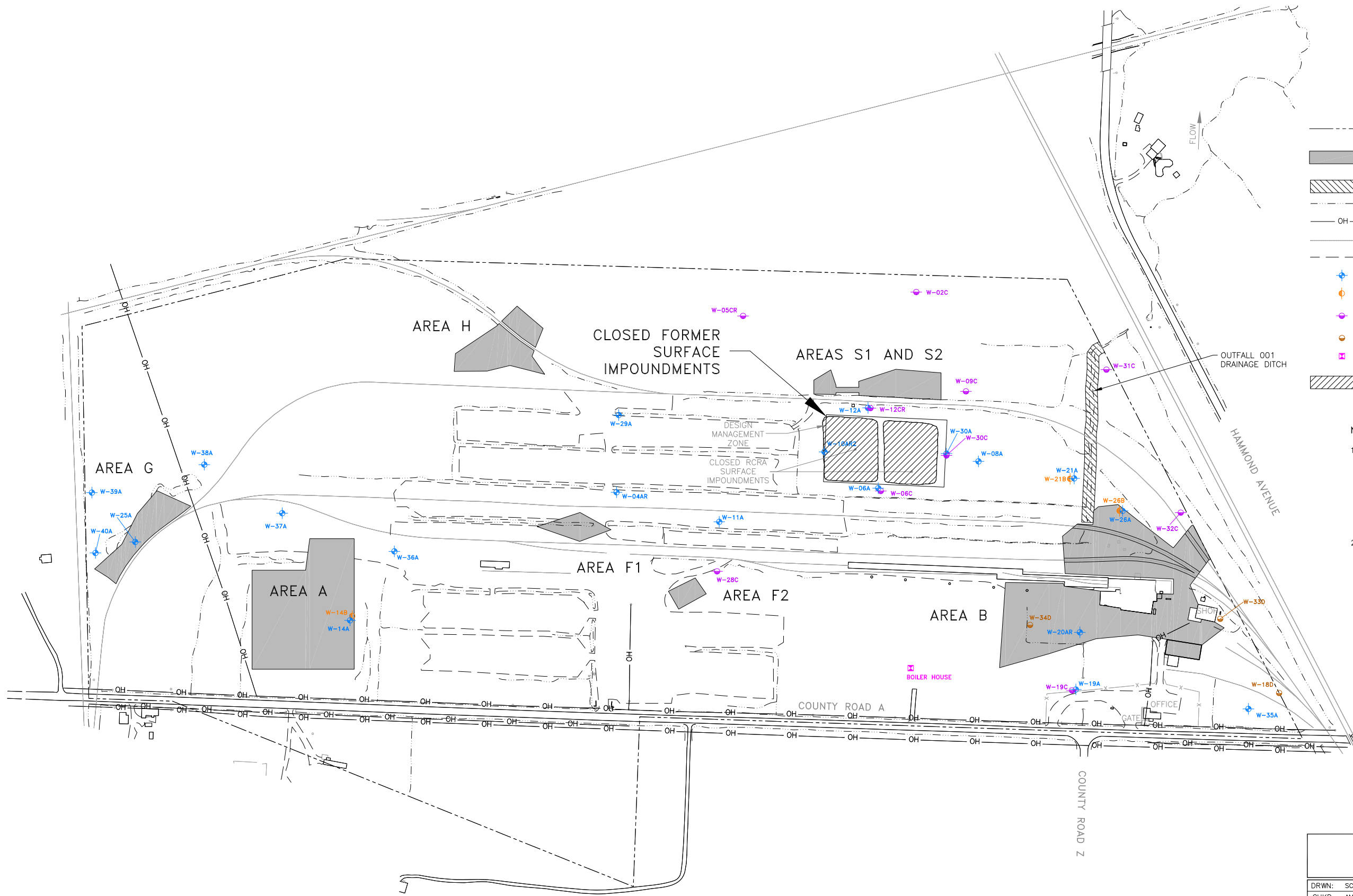
**Notes:**

1. Measurements obtained using an oil/water interface probe affixed to 3/4-inch PVC pipe.
2. Probe advanced into horizontal portion of pipe.

**FIGURE**

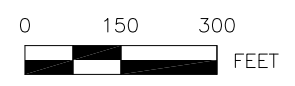


Q:\Projects\Beazer Projects\Superior\CADD\2016 Annual Inspection Report\Figure 1.dwg LAYOUT: 1. SAVED: 12/14/2016 7:49 AM ACADVER: 20.15 (LMS TECH) PAGES: 20.15 PLOTTABLE: FTS.CTB PLOTTED: 12/14/2016 7:50 AM BY: SHELLY COMIER



- LEGEND:**
- KOPPERS INC. FACILITY PROPERTY BOUNDARY
  - LIMIT OF 1' SURFACE COVER  
NO DISTURBANCE, LIMITED VEHICLE TRAFFIC TO GRAVEL AREAS ONLY
  - ▨ LIMIT OF ENGINEERED LINER SYSTEM  
NO DISTURBANCE, NO VEHICLE TRAFFIC
  - - - WATER COURSE
  - OH OVERHEAD POWER LINE (APPROXIMATE)
  - RAILROAD LINES
  - - - GRAVEL ACCESS ROAD
  - A ZONE (SHALLOW CLAY) MONITORING WELL
  - B ZONE (INTERMEDIATE CLAY) MONITORING WELL
  - C ZONE (DISCONTINUOUS SAND LENS) MONITORING WELL
  - D ZONE (BEDROCK) MONITORING WELL
  - KOPPERS SUPPLY WELL (BEDROCK)
  - ▨ FORMER RCRA IMPOUNDMENTS  
NO DISTURBANCE, NO VEHICULAR ACCESS

- NOTES:**
1. BASE MAP OBTAINED FROM PHOTOGRAMMETRY PERFORMED BY LOCKWOOD MAPPING COMPANY OF ROCHESTER, NY (12/28/01). GENERAL TOPOGRAPHY OBTAINED FROM AERIAL PHOTOGRAPHY BASED SURVEY BY AXIS GEOSPATIAL COMPANIES OF EASTON, MARYLAND (8/17/08). AS-BUILT TOPOGRAPHY OF CORRECTIVE ACTION AREAS OBTAINED FROM GROUND SURVEY BY LHB, INC. OF DULUTH, MINNESOTA.
  2. ALL LOCATIONS ARE APPROXIMATE.



BEAZER EAST, INC. PITTSBURGH, PENNSYLVANIA		 FIELD & TECHNICAL SERVICES, LLC 200 THIRD AVENUE CARNEGIE, PA 15106
DRWN: SCC	DATE: 12/14/16	
CHKD: AMG	DATE: 12/14/16	
APPD: DRF	DATE: 12/14/16	
SCALE: AS SHOWN		
ISSUE DATE:		
KOPPERS INC. PLANT SUPERIOR, WISCONSIN		
SITE PLAN	PROJECT NO: OM055609 DRAWING NUMBER FIGURE 1	

**REFERENCE:**  
1. CAD FILES PROVIDED BY ARCADIS FOR A FIGURE ENTITLED SITE PLAN AND DENOTED AS FIGURE 1.

# ATTACHMENT 1



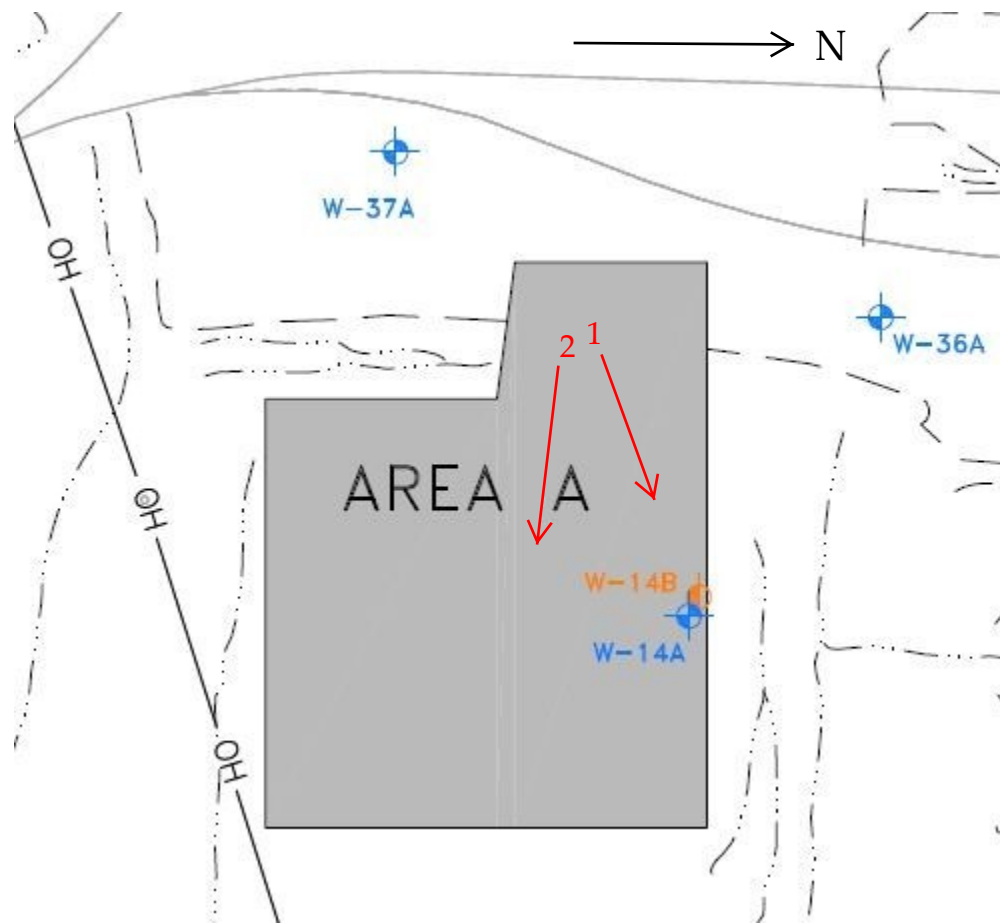
Site Inspection – 10/04/22

# Former Koppers Inc. Facility – Superior, WI

By Field & Technical Services

Marie Ferrick  
10/04/2022

Area A:





**Photographs:**

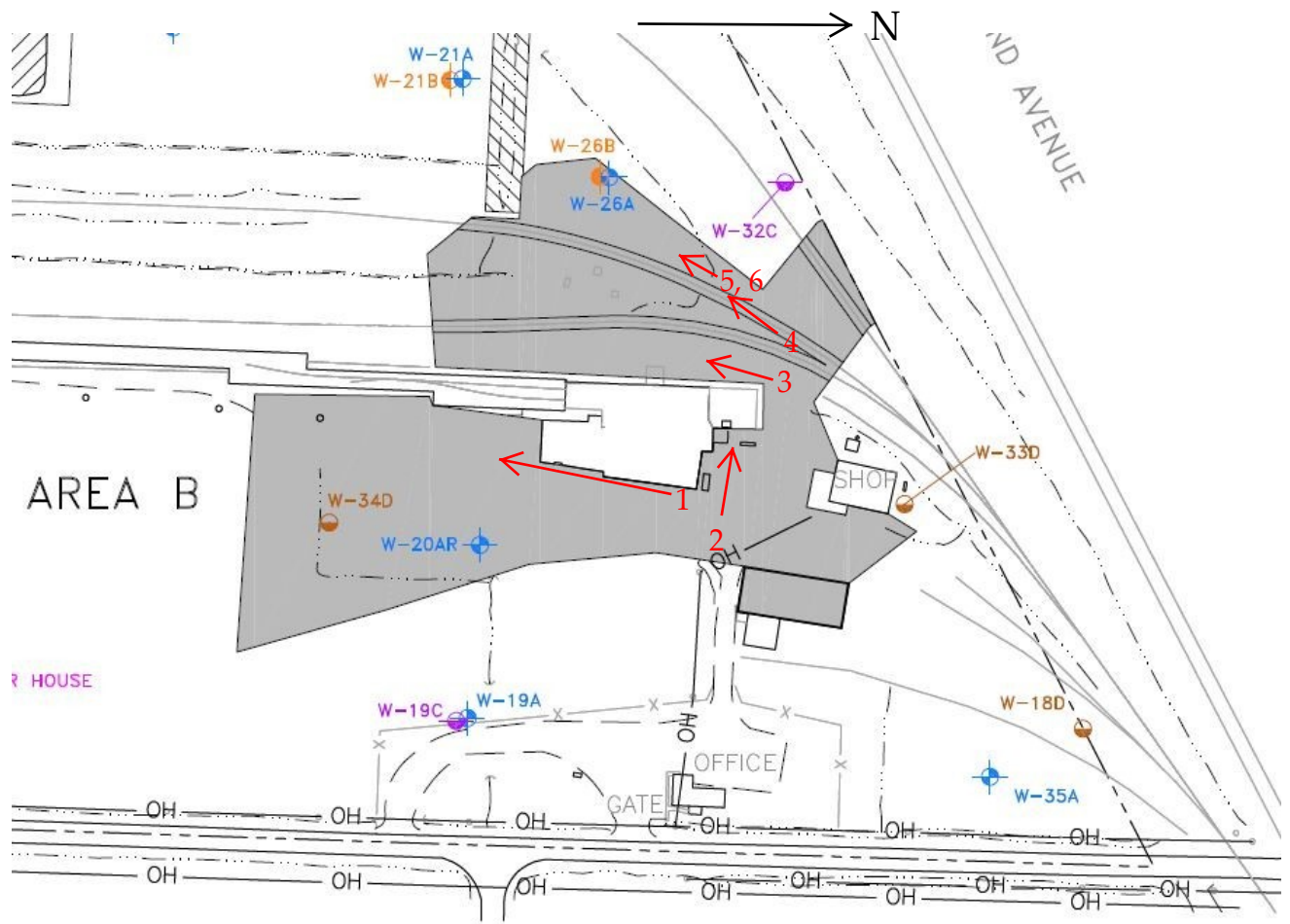
Area A Photo 1, looking Northeast from West side:



Area A Photo 2, looking East from West side:



# Area B:



Area B Photo 1, looking South from North East central area:



Area B Photo 2, looking West from Eastern edge:



Area B Photo 3, looking South from North Central area:



Area B Photo 4, looking South from North West:



Area B Photo 5, Close up of photo 4:

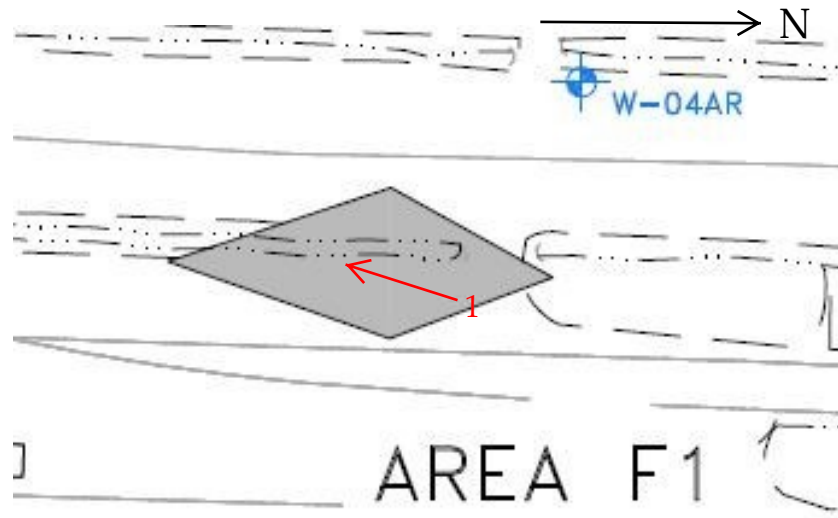




Area B Photo 6, Close up of photo 4:



Area F1:



Area F2:



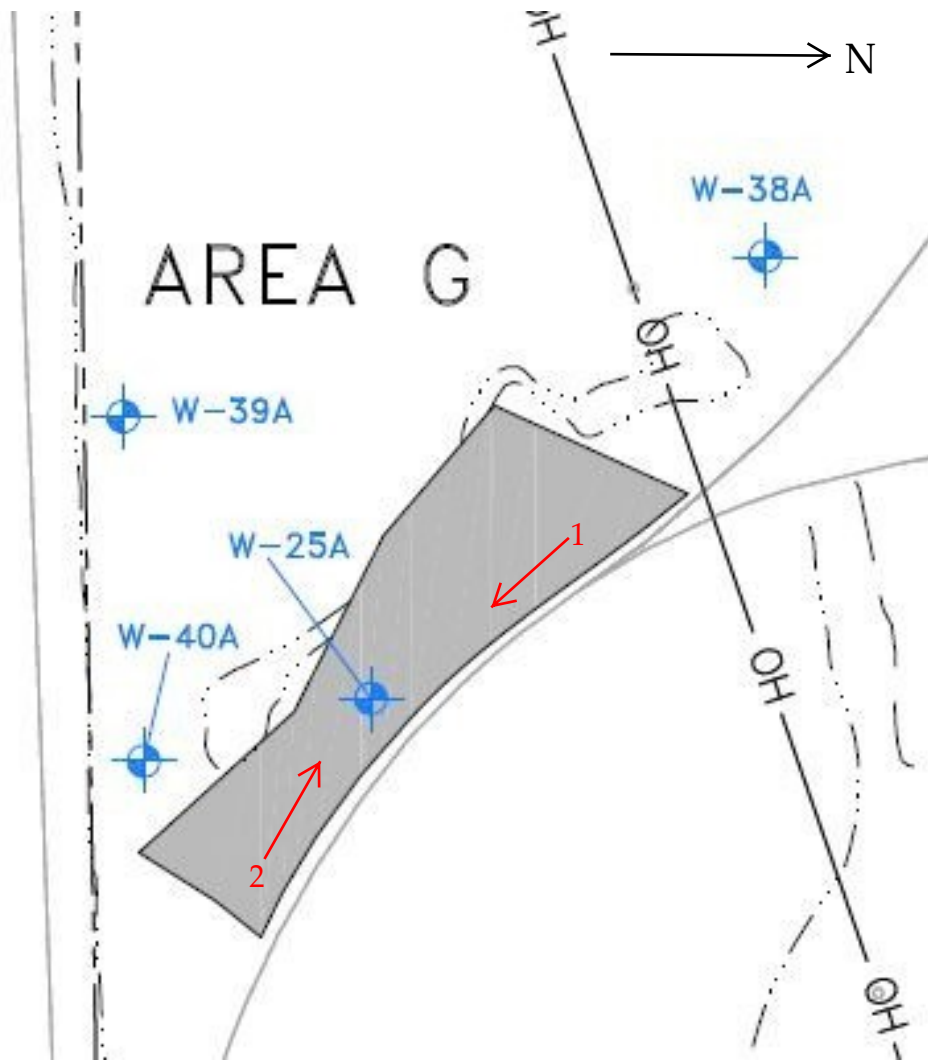
Area F1 Photo 1, Looking South from North end:



Area F2 Photo 1, Looking Northeast from Southwest:



Area G:



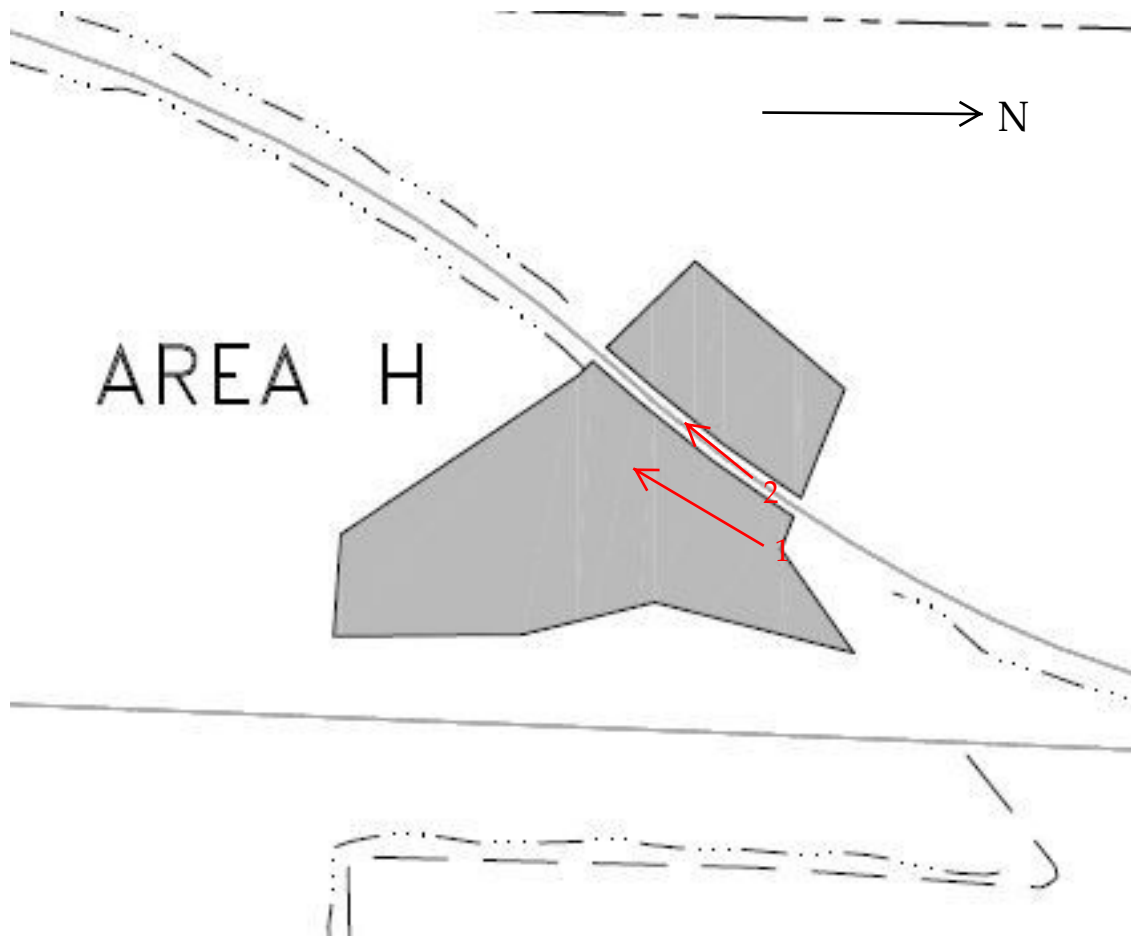
Area G Photo 1, looking Southeast from Northwest corner:



Area G Photo 2, looking Northwest from Southeast corner:



Area H:





Area H Photo 1, (East side of RR tracks) looking Southwest from Eastern side:



Area H Photo 2, (West side of RR tracks) looking Southwest from western side:



Area S1 and S2:

AREAS S1 AND S2



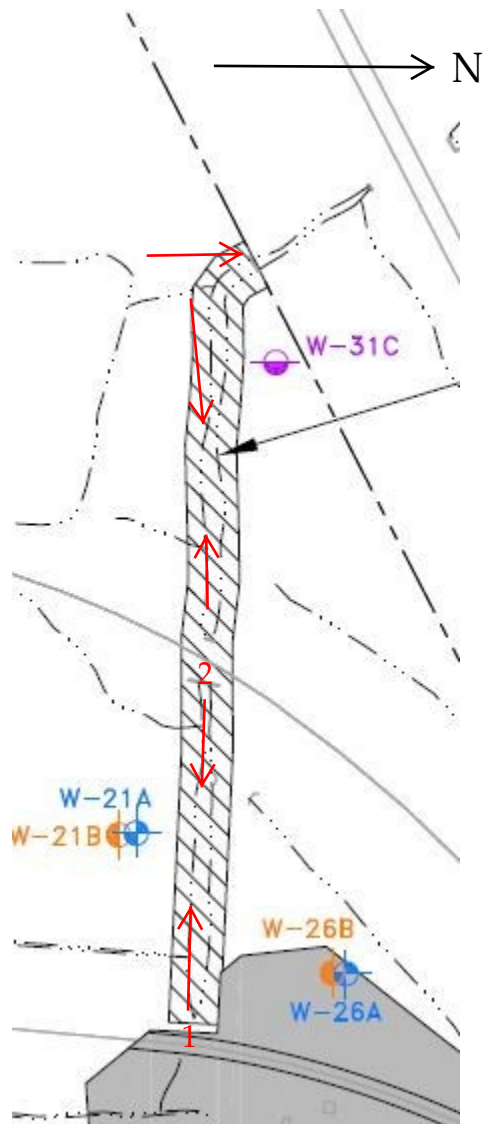
Area S Photo 1, looking North from center of area:



Area S Photo 2, looking South from center of area:



# Outfall 001 and Drainage Ditch:



Outfall 001 Drainage Ditch Photo 1, looking West from Eastern edge:



Outfall 001 Drainage Ditch Photo 2, looking West from center area:





Outfall 001 Drainage Ditch Photo 3, looking West from center area:



Outfall 001 Drainage Ditch Photo 4, looking East from Western edge:



Outfall 001 Drainage Ditch Photo 5, looking North from Southern edge of ditch:



**Post Construction Site Inspection Form**  
**Beazer East, Inc.**  
**Koppers Inc. Facility, Superior, Wisconsin**

Inspection Date: 10-04-2022

Weather Conditions: Partial clouds, 60s

Inspector Name and Organization: Marie Ferrick FTS

Inspector Signature: Marie Ferrick

**Area A**

(check one)	No	Yes	If yes, provide description and take photos
Excessive erosion	X		
Evidence of excessive settling or ponding	X		
Areas lacking well-established vegetation	X		

Action Items: NA

Photographs: Photo: 1 ; looking Northeast from west side  
 Photo: 2 ; looking East from west side  
 Photo: \_\_\_\_\_ ; \_\_\_\_\_  
 Photo: \_\_\_\_\_ ; \_\_\_\_\_  
 Photo: \_\_\_\_\_ ; \_\_\_\_\_

**Area B**

(check one)	No	Yes	If yes, provide description and take photos
Excessive erosion	X		<u>Depression</u>
Evidence of excessive settling or ponding	X	<del>X</del>	<u>Ditch filled with water, photos <u>5</u> + <u>6</u></u> MF 11-14-22 MF 11-14-22
Areas lacking well-established vegetation	X	<del>X</del>	

Action Items: NA

Photographs: Photo: 1 ; looking South from North East central area  
 Photo: 2 ; looking West from Eastern edge  
 Photo: 3 ; looking South from North Central area  
 Photo: 4 ; looking South from North west  
 Photo: 5 ; close up of photo 4  
 Photo: 6 ; close up of photo 4

**Area F-1**

(check one)	No	Yes	If yes, provide description and take photos
Excessive erosion	X		
Evidence of excessive settling or ponding	X		
Areas lacking well-established vegetation	X		

**Action Items:** NA

**Photographs:** Photo: 1; looking South from North end  
 Photo: ~~2~~; ~~looking Northeast from Southwest~~ MF 10.4.22  
 Photo: \_\_\_\_\_;  
 Photo: \_\_\_\_\_;  
 Photo: \_\_\_\_\_;

**Area F-2**

(check one)	No	Yes	If yes, provide description and take photos
Excessive erosion	X		
Evidence of excessive settling or ponding	X		
Areas lacking well-established vegetation	X		

**Action Items:** NA

**Photographs:** Photo: 1; looking Northeast from Southwest  
 Photo: \_\_\_\_\_;  
 Photo: \_\_\_\_\_;  
 Photo: \_\_\_\_\_;  
 Photo: \_\_\_\_\_;

**Area G**

(check one)	No	Yes	If yes, provide description and take photos
Excessive erosion	X		
Evidence of excessive settling or ponding	X		
Areas lacking well-established vegetation	X		

**Action Items:** NA

**Photographs:** Photo: 1 ; looking Southeast from Northwest corner  
 Photo: 2 ; looking Northwest from Southeast corner  
 Photo: \_\_\_\_\_ ; \_\_\_\_\_  
 Photo: \_\_\_\_\_ ; \_\_\_\_\_  
 Photo: \_\_\_\_\_ ; \_\_\_\_\_

**Area H**

(check one)	No	Yes	If yes, provide description and take photos
Excessive erosion	X		
Evidence of excessive settling or ponding	X		
Areas lacking well-established vegetation	X		

**Action Items:** NA

**Photographs:** Photo: 1 ; (East side of RR tracks) looking southwest from E. side  
 Photo: 2 ; (West side of RR tracks) looking southwest from W. side  
 Photo: \_\_\_\_\_ ; \_\_\_\_\_  
 Photo: \_\_\_\_\_ ; \_\_\_\_\_  
 Photo: \_\_\_\_\_ ; \_\_\_\_\_

**Areas S-1 and S-2**

(check one)	No	Yes	If yes, provide description and take photos
Excessive erosion	X		
Evidence of excessive settling or ponding	X		
Areas lacking well-established vegetation	X		

**Action Items:** NA

**Photographs:** Photo: 1 ; looking North from center of area  
 Photo: 2 ; looking south from center of area  
 Photo: \_\_\_\_\_ ; \_\_\_\_\_  
 Photo: \_\_\_\_\_ ; \_\_\_\_\_  
 Photo: \_\_\_\_\_ ; \_\_\_\_\_

**Outfall 001 Drainage Ditch**

(check one)	No	Yes	If yes, provide description and take photos
Excessive erosion	X		
Evidence of excessive settling or ponding	X		
Areas lacking well-established vegetation	X		

**Action Items:** NA

**Photographs:** Photo: 1 ; looking West from Eastern edge  
 Photo: 2 ; looking west from center area  
 Photo: 3 ; looking west from center area  
 Photo: 4 ; looking East from Western edge  
 Photo: 5 ; looking North from Southern edge of ditch