



Field & Technical Services

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

December 1, 2020

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: 2020 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 2020, for the Former Koppers Inc. Facility in Superior, Wisconsin (the Site). This report documents the monitoring and maintenance activities conducted during 2020 for the completed on-property corrective measures (i.e., surface covers and Outfall 001 drainage ditch liner system; Figure 1).

The 2020 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 7, 2020); and
- Visually inspecting the surface covers and Outfall 001 drainage ditch liner system (performed on October 7, 2020).

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 7, 2020 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 2020 inspection.

December 1, 2020

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 Gatchie
Project Manager

Attachments

cc: Jane Patarcity, Beazer
Linda Paul, Koppers
David Bessingpas, Arcadis
Terry Peterson, TRP

TABLE



Table 1
Summary of Outfall 001 Drainage Ditch Sump DNAPL Monitoring/Removal Data ¹
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	
East Sump							
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 ²	--	--	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	
West Sump							
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 ²	--	--	No DNAPL detected with interface probe or visible on PVC	
9/9/11	11.05	--	21.54 ²	--	--	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	

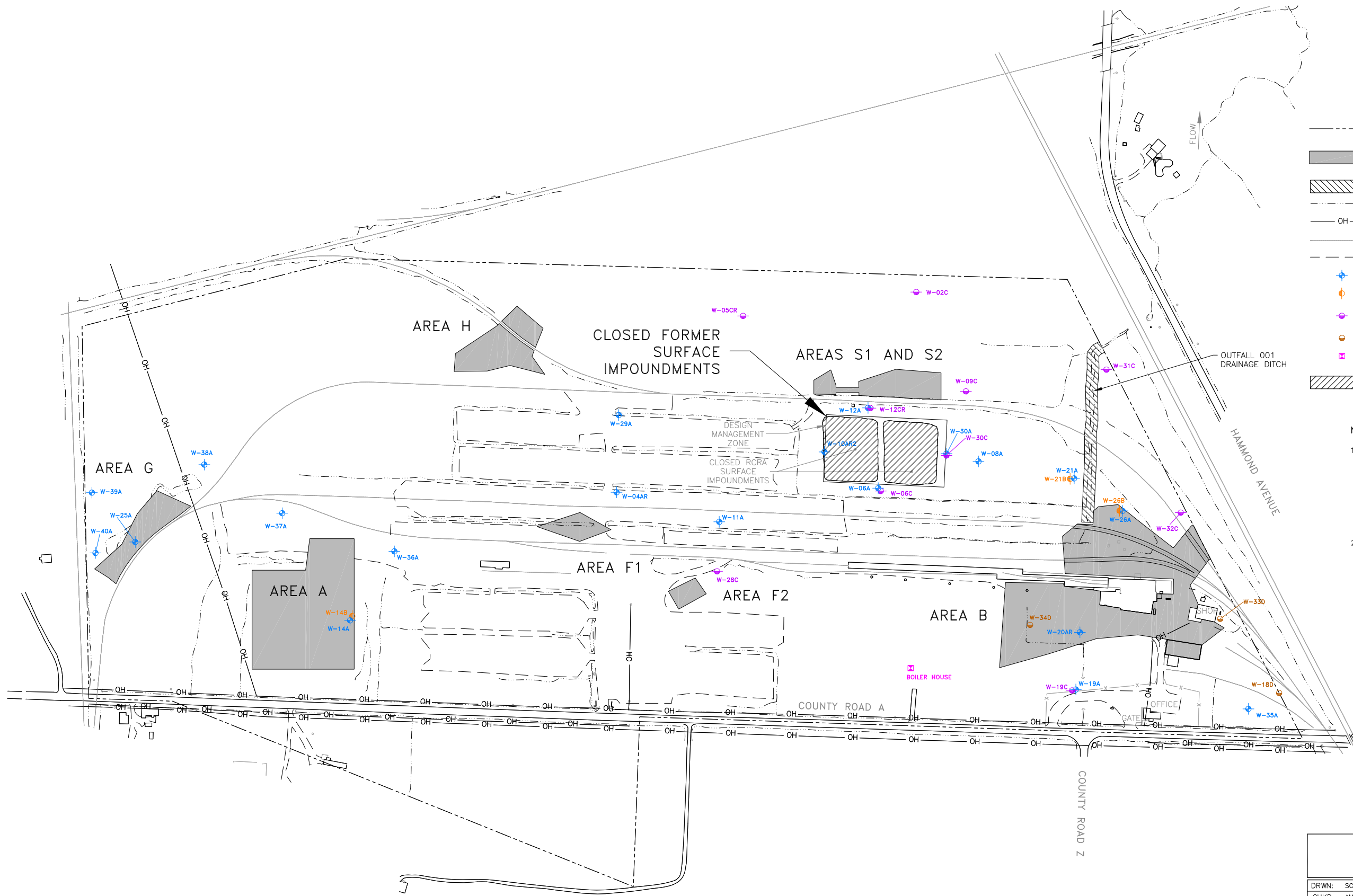
Notes:

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

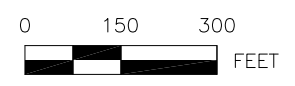


Q:\Projects\Beazer Projects\Superior\CADD\2016 Annual Inspection Report\Figure 1.dwg LAYOUT: 1. SAVED: 12/14/2016 7:49 AM ACADVER: 20.15 (LMS TECH) PAGES: 20.15 PLOTTABLE: FTS.CTB PLOTTED: 12/14/2016 7:50 AM BY: SHELLY COMIER



- 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



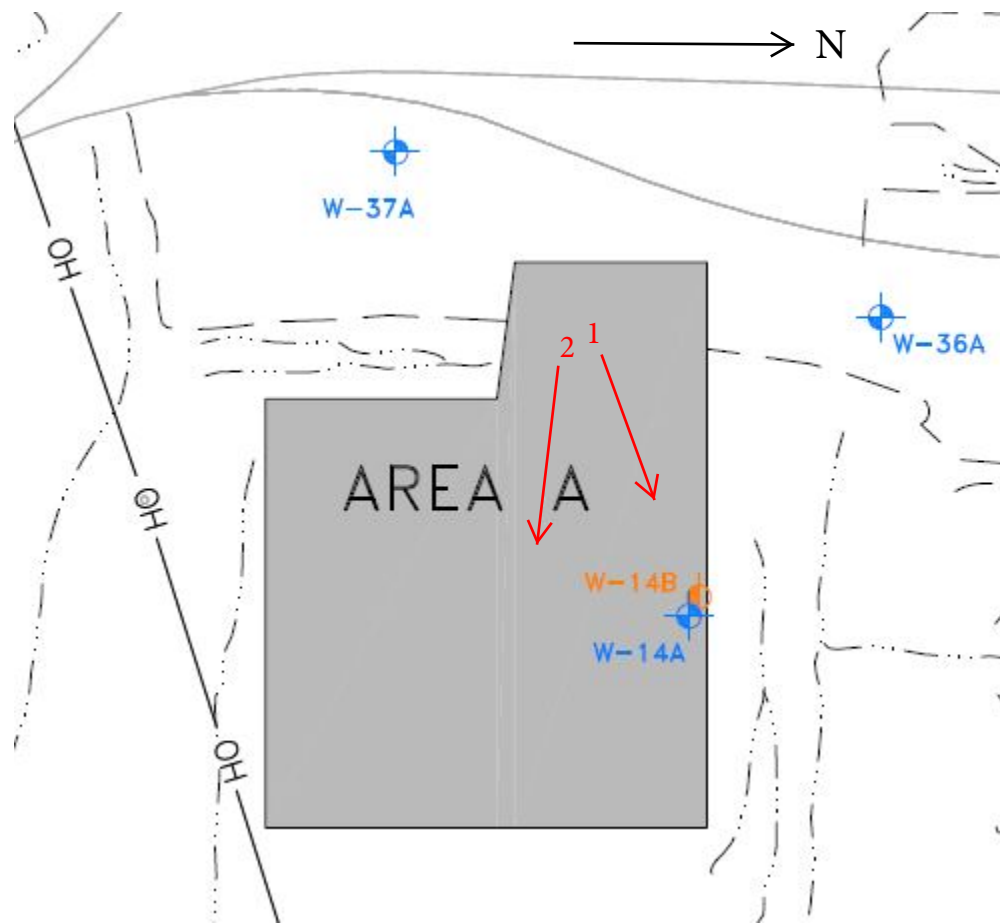
Site Inspection – 10/14/20

Former Koppers Inc. Facility – Superior, WI

By Field & Technical Services

Kaitlyn McMullen
10/14/2020

Area A:



Photographs:

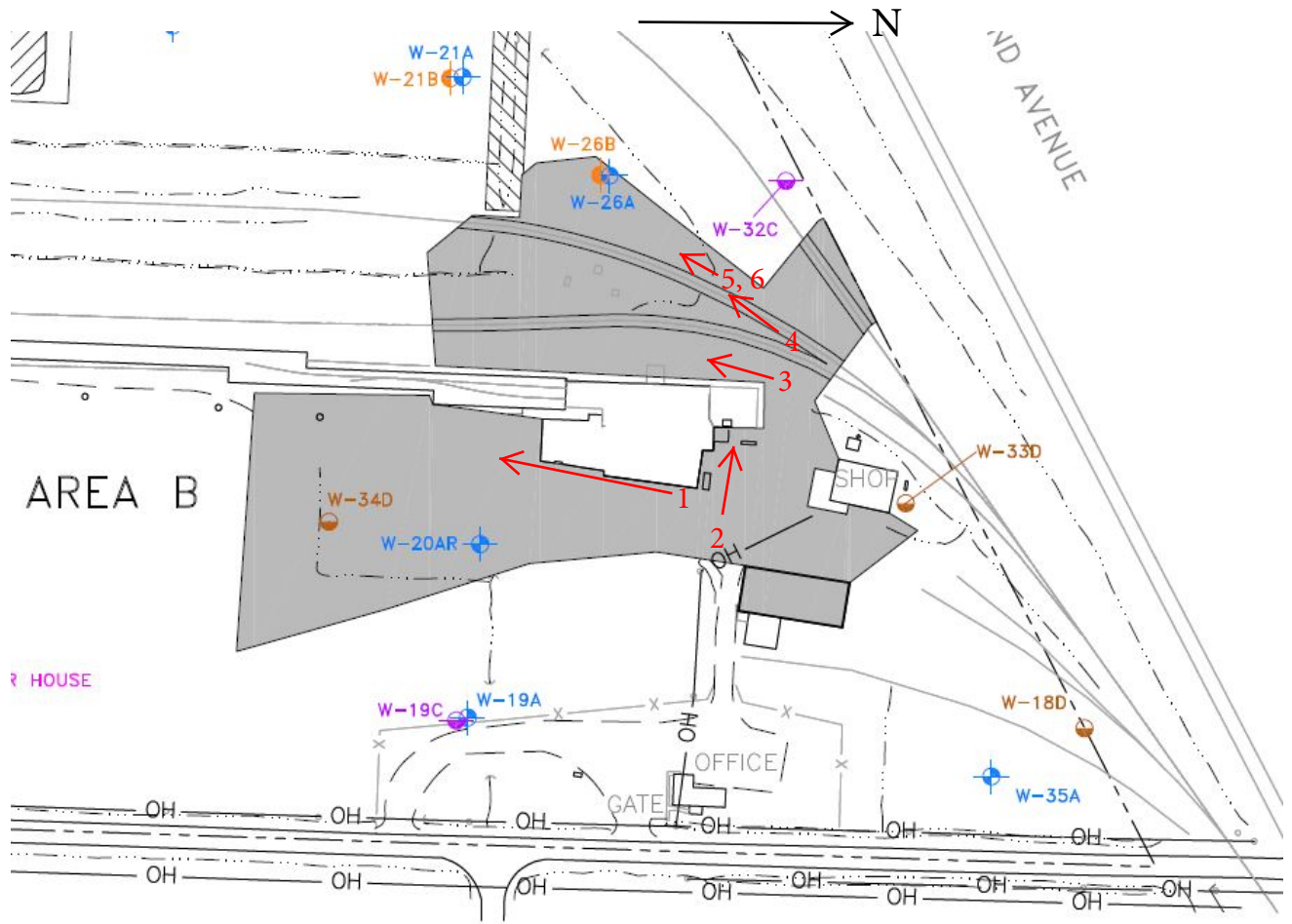
Area A Photo 1, looking Northeast from West side:



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:



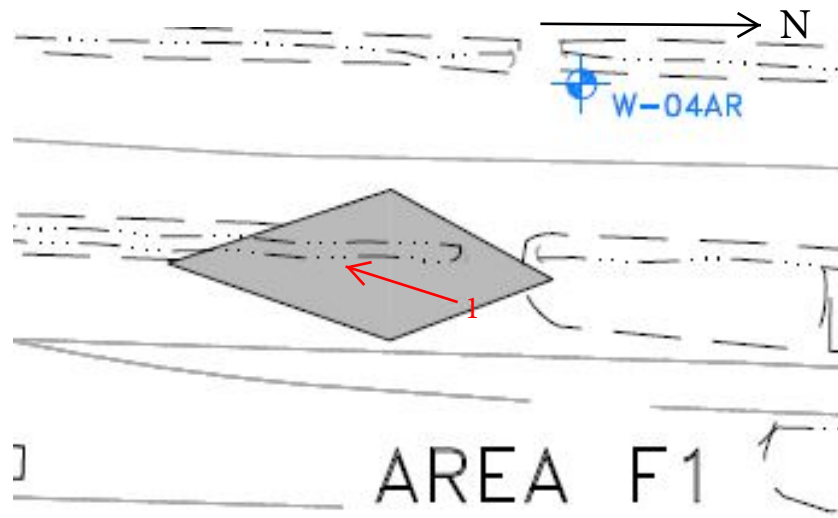
Area B Photo 5, Close up of photo 4:



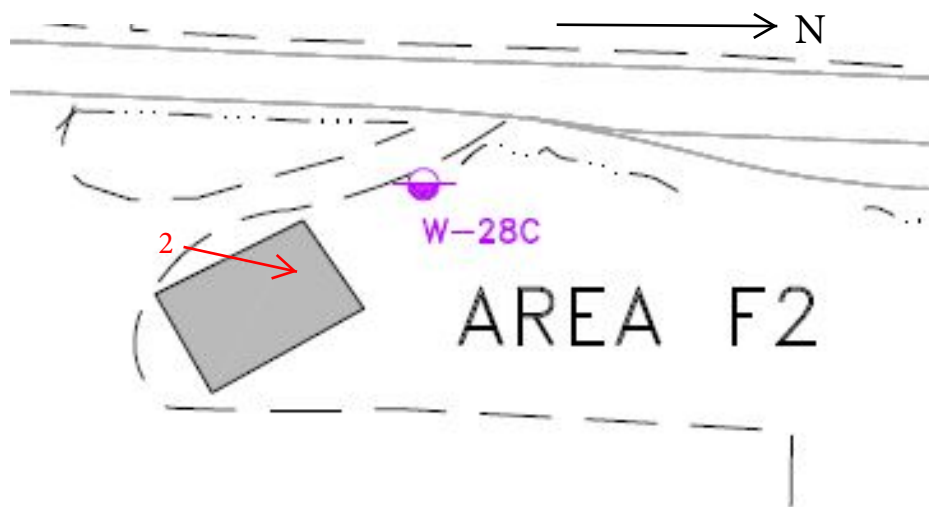
Area B Photo 6, Close up of photo 4:



Area F1:



Area F2:



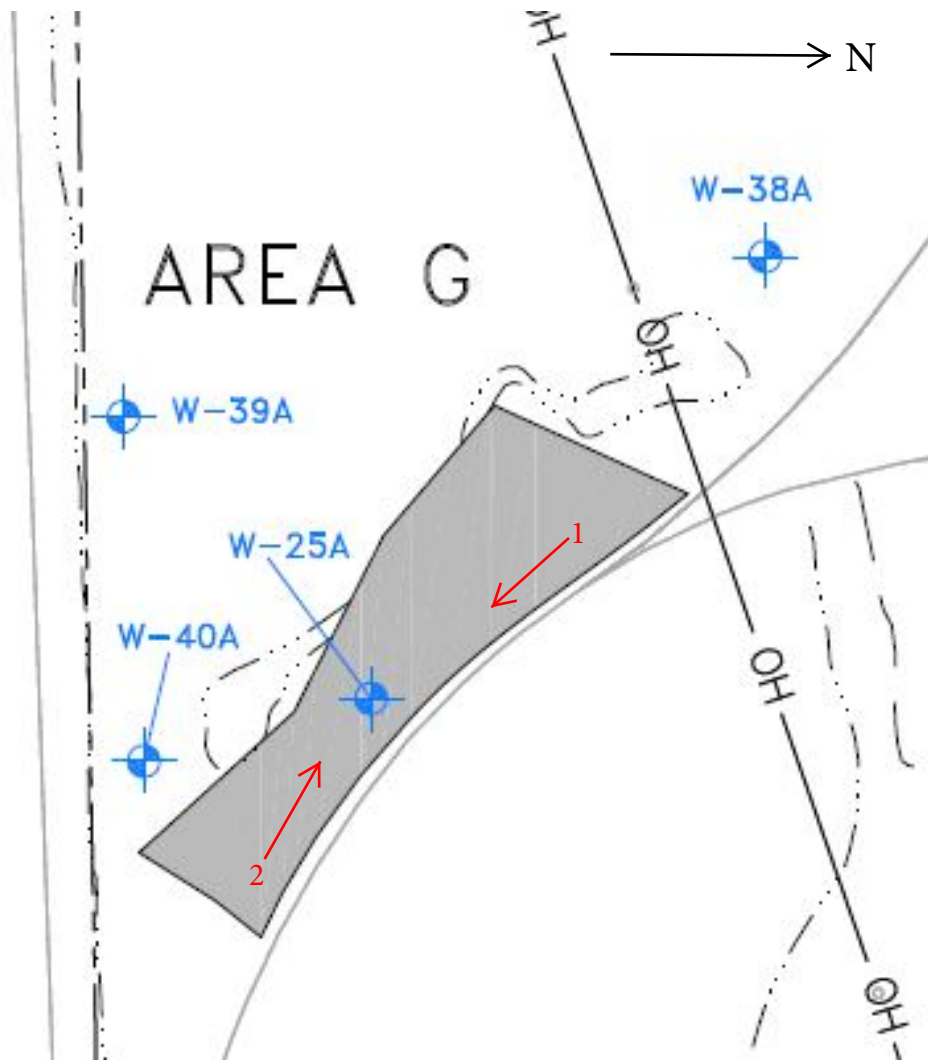
Area F1 Photo 1, Looking South from North end:



Area F2 Photo 1, Looking Northeast from Southwest:



Area G:



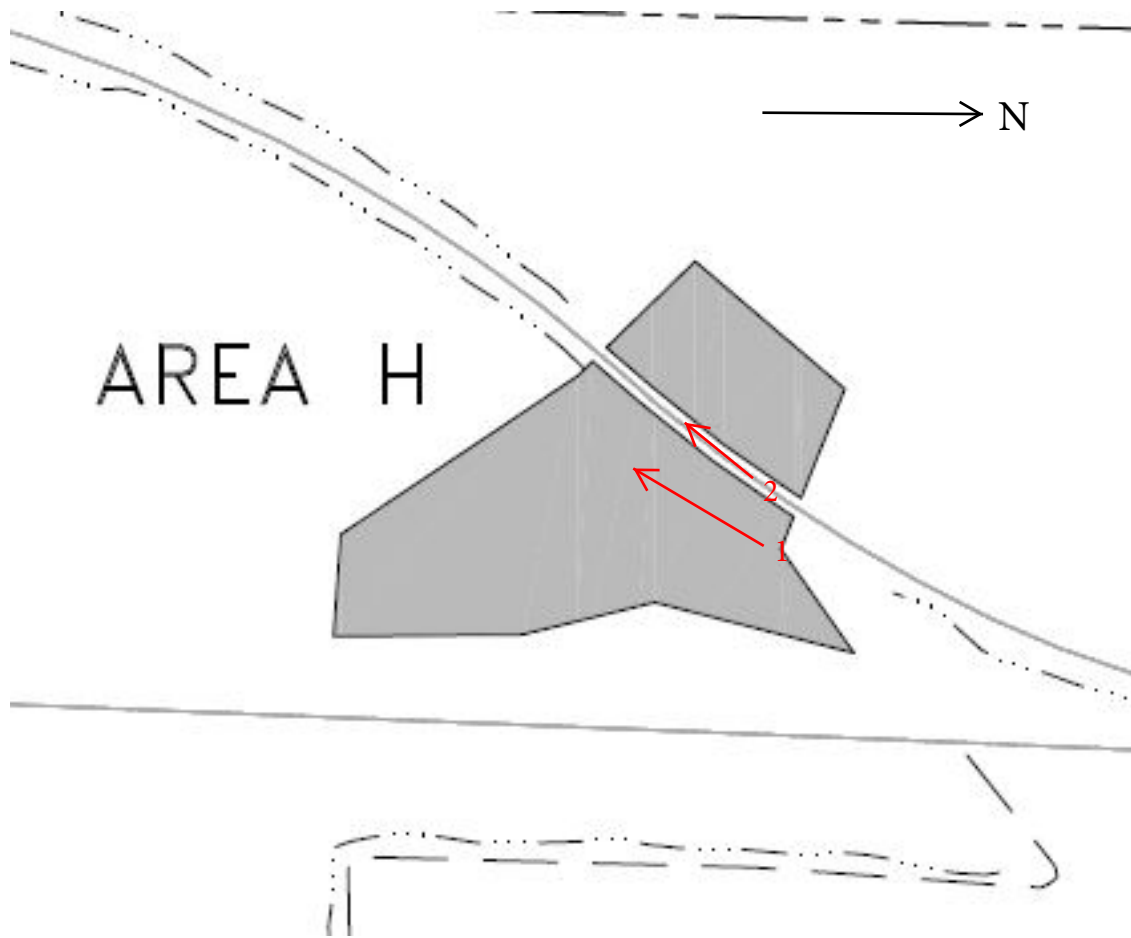
Area G Photo 1, looking Southeast from Northwest corner:



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:

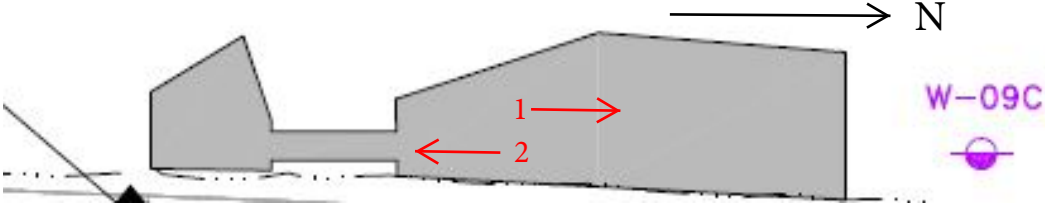


Area H Photo 2, (West side of RR tracks) looking Southwest from western side:



Area S1 and S2:

AREAS S1 AND S2



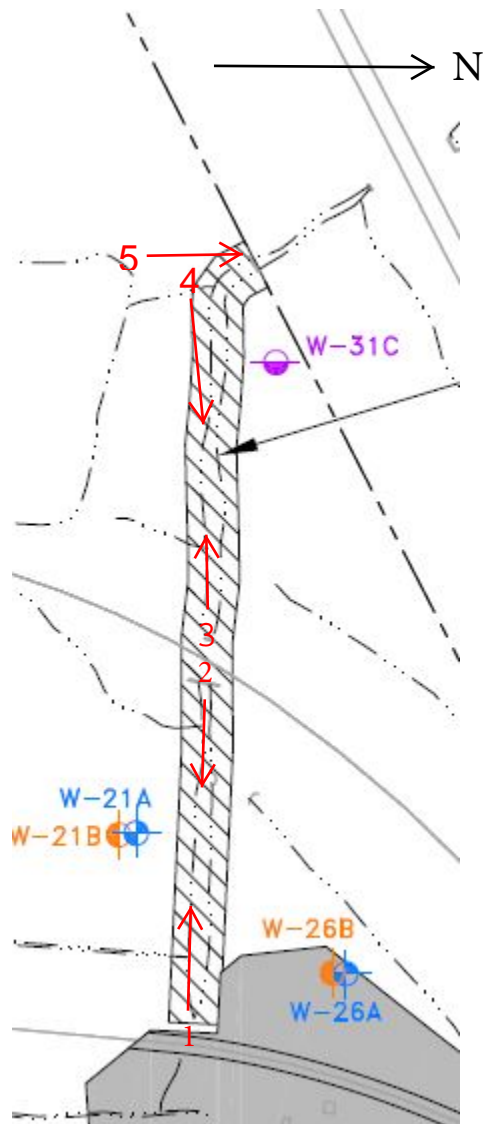
Area S Photo 1, looking North from center of area:



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: 10/14/20

Weather Conditions: 60's, sunny

Inspector Name and Organization: Kaitlyn McMullen FTS

Inspector Signature: Kaitlyn McMullen

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: N/A

Photographs: Photo: 1 ; Looking NE from west side of area

Photo: 2 ; Looking E from west side of area

Photo: _____ ; _____

Photo: _____ ; _____

Photo: _____ ; _____

Area B

(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: _____

Photographs: Photo: 1 ; Looking S from north east central area

Photo: 2 ; Looking W from eastern edge

Photo: 3 ; Looking S from north central section

Photo: 4 ; Looking S from north west

Photo: 5+6 ; Close up of slight depressions

Area F-1

<i>(check one)</i>	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 S from North edge on E side of tracks
 Photo: _____;
 Photo: _____;
 Photo: _____;
 Photo: _____;

Area F-2

<i>(check one)</i>	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 NE from SW area
 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 SE from North West
 Photo: 2 ; Looking NW from South East
 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 ; Looking SW from Eastern side
 Photo: 2 ; Looking SW from Western 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 N from center of area
 Photo: 2 ; Looking S 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 W from Eastern edge
 Photo: 2 ; Looking E from center of area
 Photo: 3 ; Looking W from center of area
 Photo: 4 ; Looking E from western edge
 Photo: 5 ; Looking N from southern edge of ditch