

Technical Memo



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To: Geoff Strack, SKB (Austin) Environmental, LLC.

From: Dave Parenteau, PE (MN), Wenck Associates, Inc.

Date: January 9, 2018

Subject: 2018 Annual Inspection SKB Lansing - Report of CCR Landfill Inspection
Wenck Project # B3053-0094

I hereby certify that this engineering document was prepared by me or under my direct supervision and that I am a duly registered Professional Engineer under the laws of the State of Minnesota.

David M. Parenteau
PE # 41243

A handwritten signature in blue ink, appearing to read 'David M. Parenteau', is written over a horizontal line.

Jan 9, 2018

Purpose

This memorandum fulfills the requirements of 40 CFR § 257.84 Inspection Requirements for CCR Surface Landfills, Part b, regarding annual inspection by a qualified professional engineer.

Background and Applicability

SKB (Austin) Environmental, LLC owns and operates the SKB Lansing Landfill, a Class III facility operating under MPCA Solid Waste Permit SW-514, originally issued in 1996.

The site is located off of 243rd Street and State Highway 218, north of Austin Minnesota. The attached Figure 1 presents an overview of the site.

There are 4 permitted disposal cells in the Landfill. Cell 1 is unlined and has not received any CCR material. Cell 2 is composite lined and has a portion of the liner that overlies the south slope of Cell 1. Phase 3 of Cell 2 was recently constructed and is immediately north of Cell 2 Phases 1, and 2. The active area is within Cell 2. The site began receiving CCR material in June of 2015 and it has all been placed in the various phases of Cell 2.

CCR Landfill Inspection (40 CFR § 257.84)

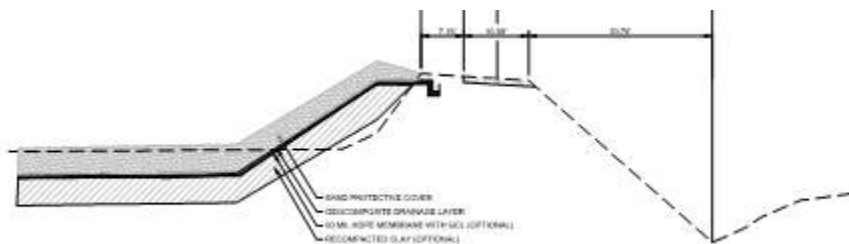
On November 16, 2017, Dave Parenteau conducted the on-site inspection the CCR Landfill. During the inspection the following activities were performed.

- ▲ Available information regarding status and condition of the CCR unit, including, but not limited to, files available in the operating record were reviewed. Past inspection reports were reviewed on site, and SKB (Austin) Environmental LLC

provided copies of cell construction documentation reports for review in preparing this report.

- ▲ The documentation reviewed covered the following topics
 - CCR unit design and construction information required by § 257.73(c)(1);
 - Previous periodic structural stability assessments required under § 257.73(d); It should be noted that §257.74 does not apply as the site is not new, nor is it a lateral expansion of an existing impoundment/landfill, therefore this is not addressed.
 - The results of inspections by a qualified person (contained below);
 - Results of previous annual inspections;

The landfill cell embankments were constructed using on-site and import controlled fill materials, and compacted in lifts. A typical perimeter section, taken from the Cell 2, Phase 2 Construction Documentation Report, prepared by CRA in November, 2012 is shown below.



- ▲ A visual inspection of the CCR units to identify signs of distress or malfunction of the CCR unit and appurtenant structures; and

There were no observed signs of distress or malfunction on the CCR Landfill and their corresponding appurtenant structures. Photos taken during the inspection are provided in Attachment 1 and Figure 2 shows where the photos were taken.

CCR Landfill Inspection Report

40 CFR § 257.84, Subpart b.2 requires the following topics in italics be addressed within this report. The requirements are shown in italics with the response immediately afterwards for each item.

- (i) *Any changes in geometry of the impounding structure since the previous annual inspection;*

There were no apparent changes from the geometry of the impoundment when compared to the permit drawings or the past construction documentation reports. Also, the recent aerial survey done in November, 2017 shows that the topography of the embankments has stayed straight and true. This is shown on Figure 3.

- (ii) *The approximate volume of CCR contained in the unit at the time of the inspection;*

The approximate volume of CCR material contained in the landfill at the time of the inspection is 46,900 cubic yards.

- (iii) *Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit and appurtenant structures; and*

None of the following were observed that could indicate structural weakness;

- Signs of slumping or rotational movement.
- Lateral or vertical distortion of the embankment crest
- Seepage on the outboard slope;
- Burrowing activity of varmints;

- (iv) *Any other change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection.*

There were no changes noted that may could potentially affect the stability or operation of the impoundment. Observations were consistent with those noted in that report.

Notification Requirements

SKB (Austin) Environmental LLC will comply with the recordkeeping requirements specified in § 257.105(g), the notification requirements specified in § 257.106(g), and the internet requirements specified in § 257.107(g).

Conclusions and Recommendations

There were no recommendations presented in the 2017 inspection report that needed to be addressed in this 2018 inspection report.

The soils used for embankment construction have been placed in a controlled manner. The cells are lined with a geomembrane ensuring that there is no leachate seeping through the embankment from the waste material. The landfill embankment crests are wide in width, have slopes no steeper than 3H:1V, and are relatively short in height, ranging from zero to approximately 15 feet in height. The slopes are well vegetated and the site is well run and maintained.

40 CFR § 257.83, Subpart b.5 and 40 CFR § 257.84, Subpart b.5 each require that if a deficiency or release is identified during an inspection, the owner or operator must remedy the deficiency or release as soon as feasible and prepare documentation detailing the corrective measures taken.

There were no deficiencies or releases identified during the inspection that require remedy as soon as possible.

Attachment 1

Photos

**Waste Connections
SKB (Austin) Environmental LLC
2017 Site Inspection Report Photo List**

Photo Location	Photo #	Phase	Side of LF/Cell	Slope	View Orientation	Photo Location	Photo #	Phase	Side of LF/Cell	Slope	View Orientation
1	1	3	North	Temp Berm	Southeast	7	21	2	South	Exterior	West
1	2	3	North	Temp Berm	Southwest	7	22	2	South	Exterior	East
2	3	3	North	Waste Face	East	7	23	2	South	Top Berm	East
2	4	1	West	Closed Face	South	8	24	2	South	Waste Face	West
3	5	1	West	Closed Face	Northeast	8	25	2	East	Waste Face	North
3	6	1	West	Closed Face	Southeast	8	26	2	South	Top Berm	West
4	7	1	West	Closed Face	North	8	27	2	South	Exterior	West
4	8	1	South	Closed Face	East	8	28	2	East	Top Berm	North
5	9	1	South	Closed Face	West	8	29	2	East	Exterior	North
5	10	1	South	Closed Face	East	9	30	2	East	Waste Face	South
5	11	1	South	Exterior	East	9	31	2	East	Top Berm	South
6	12	1	South	Waste Face	West	9	32	2	East	Exterior	South
6	13	2	South	Waste Face	East	9	33	2	East	Exterior	North
6	14	1	South	Top Berm	West	9	34	2	East	Top Berm	North
6	15	2	South	Top Berm	East	9	35	2	East	Waste Face	North
6	16	1	South	Exterior	West	10	36	2	East	Waste Face	South
6	17	2	South	Exterior	East	10	37	2	East	Top Berm	South
7	18	2	South	Waste Face	West	10	38	2	East	Exterior	South
7	19	2	South	Waste Face	East	10	39	3	North	Waste Face	East
7	20	2	South	Top Berm	West	11	40	3	East	Waste Face	Southwest

2018 Dike Integrity Inspection Report Photos SKB (Austin) Environmental LLC



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Photo 1 - Phase 3 North Temp Berm



Photo 2 - Phase 3 North Temp Berm



Photo 3 - Phase 1 West Closed Face



Photo 4 - Phase 1 West Closed Face



Photo 5 - Phase 1 West Closed Face



Photo 6 - Phase 1 West Closed Face



Photo 7 - Phase 1 West Closed Face



Photo 8 - Phase 1 South Closed Face



Photo 9 - Phase 1 South Closed Face



Photo 10 - Phase 1 South Closed Face



Photo 11 - Phase 1 South Exterior Slope



Photo 12 - Phase 2 South Waste Face



Photo 13 - Phase 2 South Waste Face



Photo 14 - Phase 2 Top South Berm



Photo 15 - Phase 2 Top South Berm



Photo 16 - Phase 2 South Exterior Slope



Photo 17 - Phase 2 South Exterior Slope



Photo 18 - Phase 2 South Waste Face



Photo 19 - Phase 2 South Waste Face



Photo 20 - Phase 2 Top South Berm



Photo 21 - Phase 2 South Exterior Slope



Photo 22 - Phase 2 South Exterior Slope



Photo 23 - Phase 2 Top South Berm



Photo 24 - Phase 2 South Waste Face



Photo 25 - Phase 2 East Waste Face



Photo 26 - Phase 2 Top South Berm



Photo 27 - Phase 2 South Exterior Slope



Photo 28 - Phase 2 East Exterior Slope



Photo 29 - Phase 2 Top East Berm



Photo 30 - Phase 2 East Waste Face



Photo 31 - Phase 2 Top East Berm



Photo 32 - Phase 2 East Exterior Slope



Photo 33 - Phase 2 East Exterior Slope



Photo 34 - Phase 2 Top East Berm



Photo 35 - Phase 2 East Waste Face



Photo 36 - Phase 2 East Waste Face



Photo 37 - Phase 2 Top East Berm



Photo 38 - Phase 2 East Exterior Slope

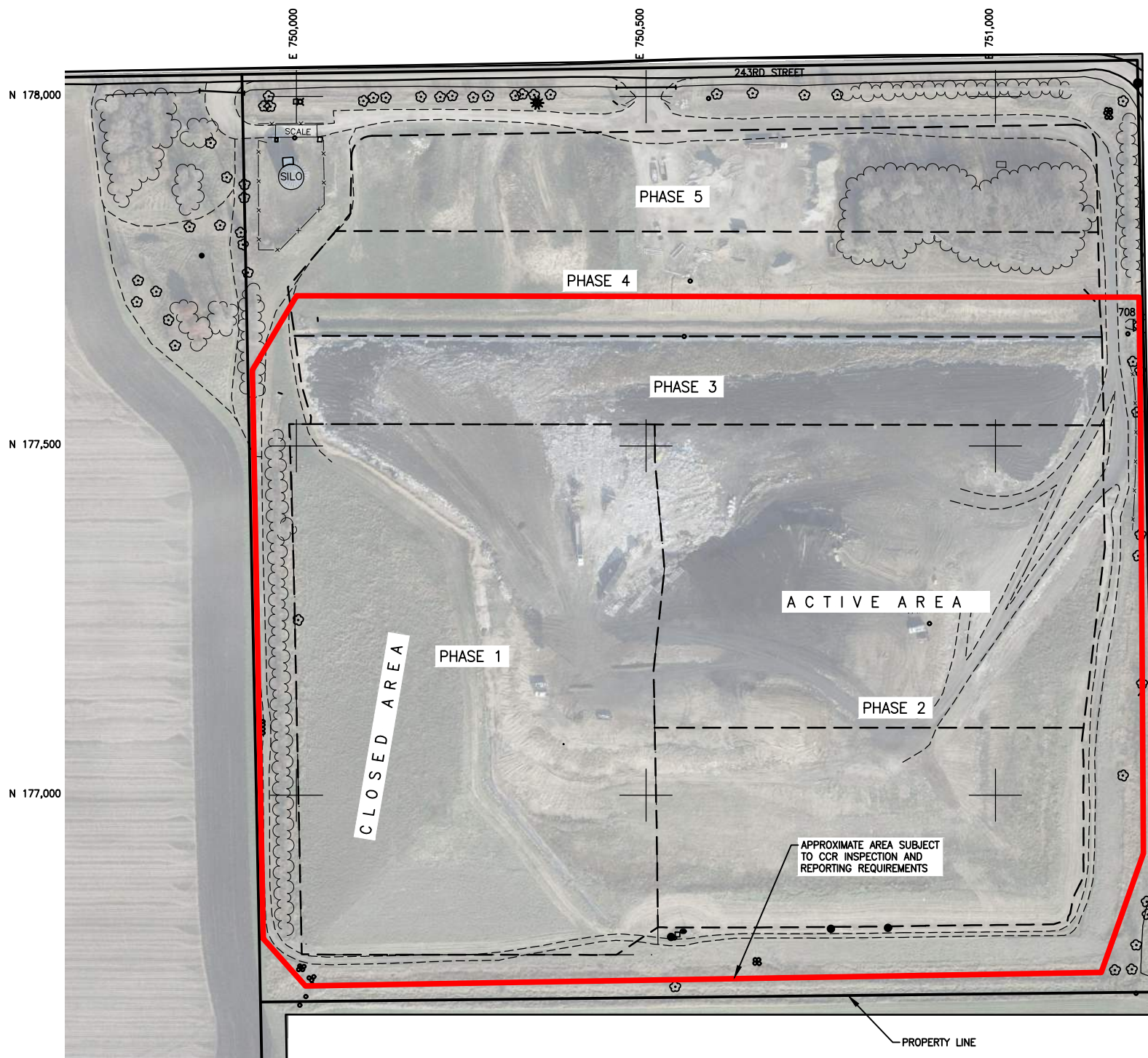


Photo 39 - Phase 2 Top East Berm



Photo 40 - Phase 2 East Exterior Slope

Figures



REV	REVISION DESCRIPTION	DWN	APP	REV DATE
0	ISSUED FOR FINAL	JVB	DMP	12/29/17

SEAL

SUB CONSULTANT

PRIME CONSULTANT



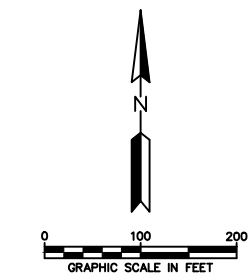
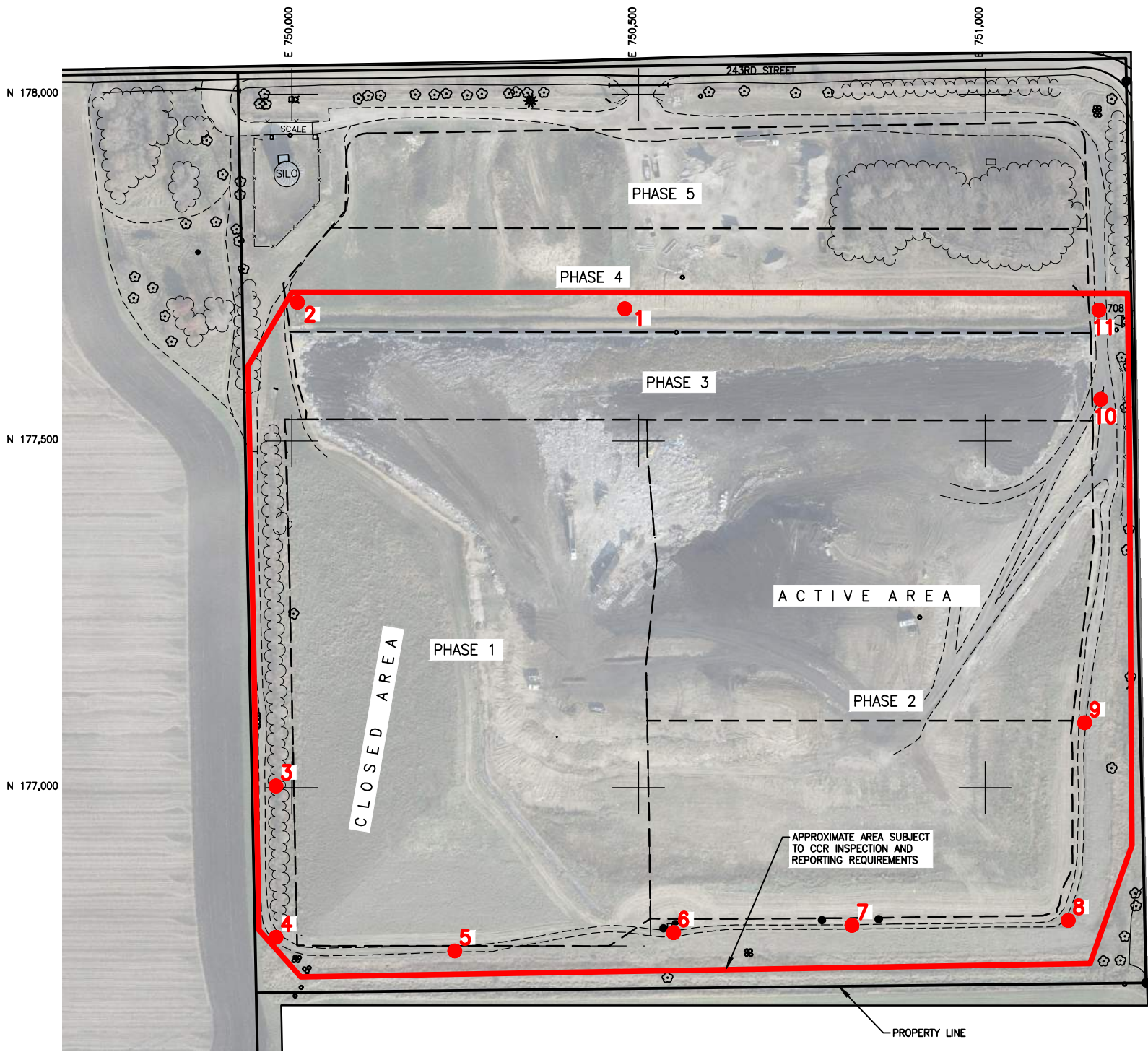
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1800 PIONEER CREEK CENTER 763-479-4242
 MAPLE PLAIN, MINNESOTA 763-749-4200

PROJECT TITLE
JAN. 2018 INSPECTION REPORT

SKB (AUSTIN) ENVIRONMENTAL, LLC
 AUSTIN, MINNESOTA

SHEET TITLE				
SITE MAP				
DWN BY	CHK'D	APP'D	DWG DATE	DEC. 2017
JVB	DMP	DMP	SCALE	AS NOTED
PROJECT NO.	SHEET NO.	FIGURE 1		REV NO.
3052-0094				0



LEGEND
 ● PHOTO LOCATIONS

NOTE:
 BASE MAPPING HAS BEEN UPDATED BY AERIAL SURVEY PROVIDED BY CONTINENTAL MAPPING COMPLETED ON NOVEMBER 8, 2017

REV	REVISION DESCRIPTION	DWN	APP	REV DATE
0	ISSUED FOR FINAL	JVB	DMP	12/29/17

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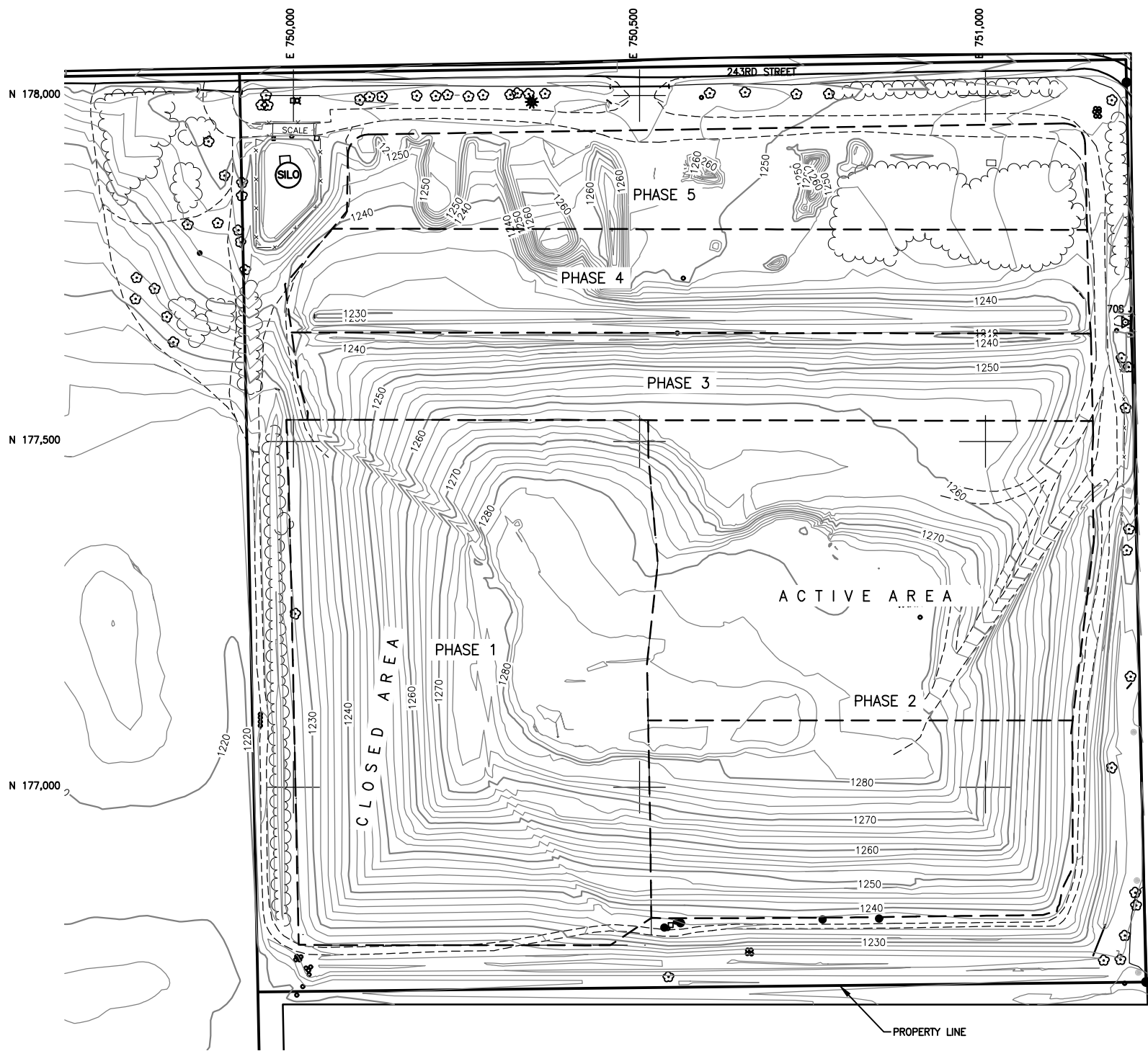
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PHOTO LOCATIONS

DWN BY	CHK'D	APP'D	DWG DATE	DEC. 2017
JVB	DMP	DMP	SCALE	AS NOTED
PROJECT NO.	SHEET NO.	REV NO.		
3052-0094	FIGURE 2			0



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 AUSTIN, MINNESOTA

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DWN BY	CHK'D	APP'D	DWG DATE
JVB	DMP	DMP	DEC. 2017
PROJECT NO.		SCALE	
3052-0094		AS NOTED	
SHEET NO.		REV. NO.	
FIGURE 3		0	