OPERATING RECORD DOCUMENT

Required per CFR 257.105(f)(10)

INTERNET POSTING Required per CFR 257.107(f)(9)

GREDELL
ENGINEERING RESOURCES

Sikeston Board of Municipal Utilities
Sikeston Power Station
Fly Ash Pond
Periodic Structural Stability Assessment

Prepared for:

BMU Sikeston
Board of Municipal Utilities

Sikeston Power Station
1551 West Wakefield Avenue
Sikeston, MO 63801

Updated February 2024

1505 East High Street
Jefferson City, Missouri 65101-4826

Telephone (573) 659-9078
www.ger-inc.biz

Sikeston Board of Municipal Utilities
Sikeston Power Station
Fly Ash Pond
Periodic Structural Stability Assessment

Updated February 2024

Table of Contents

List of Appendices

PROFESSIONAL ENGINEER'S CERTIFICATION

40 CFR 257.73(d) Periodic Structural Stability Assessments.

I, Thomas R. Gredell, P.E., a professional engineer licensed in the State of Missouri, hereby certify in accordance with 40 CFR 257.73(d)(3) that this structural stability assessment for the Sikeston Board of Municipal Utilities, Sikeston Power Station, Fly Ash Pond meets the requirements of 40 CFR 257.73(d) as found in federal regulation 40 CFR 257, Subpart D – Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments and has been prepared using methods and procedures consistent with the professional standard of care and customary practice for engineering investigations of projects of this nature.

Name: Thomas R. Gredell, P.E.

Signature: _____

Date: 02-27-2024

Registration Number: PE-021137
State of Registration: Missouri

1.0 INTRODUCTION

In accordance with the scope of services outlined in the Sikeston Board of Municipal Utilities (SBMU) Work Order #54 dated August 28, 2023, and authorized under P.O. #33632 issued September 13, 2023, GREDELL Engineering Resources, Inc. (GER) conducted a periodic structural stability assessment for the SBMU Sikeston Power Station (SPS) Fly Ash Pond, a coal combustion residual (CCR) surface impoundment.

The purpose of this assessment was to determine if the Fly Ash Pond was designed, constructed, operated, and maintained in a manner consistent with recognized and generally accepted good engineering practices under the Federal CCR rule, section (§) 40 CFR 257.73(d). This report describes GER's assessment for the Fly Ash Pond and includes the required certification by a qualified professional engineer stating this structural stability assessment was conducted in accordance with §257.73(d). The FAP is subject to the alternate compliance schedule specified by the United States Environmental Protection Agency (USEPA) under 40 CFR Part 257.100(e)(5)(ii) ((§257.100(e)(5)(ii)) due to its initial inactive status and the Response to Partial Vacatur (the Direct Final Rule).

1.1 40 CFR §257.73(d) Periodic Structural Stability Assessment

§257.73(d), which requires the initial structural stability assessment completed by GER, is provided for reference below.

(d)(1) The owner or operator of the CCR unit must conduct initial and periodic structural stability assessments and document whether the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering practices for the maximum volume of CCR and CCR wastewater which can be impounded therein. The assessment must, at a minimum, document whether the CCR unit has been designed, constructed, operated, and maintained with:*

(d)(1)(i) Stable foundations and abutments (see Section 3.1);

(d)(1)(ii) Adequate slope protection to protect against surface erosion, wave action, and adverse effects of sudden drawdown (see Section 3.2);

(d)(1)(iii) Dikes mechanically compacted to a density sufficient to withstand the range of loading conditions in the CCR unit (see Section 3.3);

(d)(1)(iv) Vegetated slopes of dikes and surrounding areas not to exceed a height of six inches above the slope of the dike, except for slopes which have an alternate form or forms of slope protection [** SEE COMMENT ON APPLICABILITY AT THE END OF SECTION 1.1];

*§257.73(F)(3) For Haz Class, Structural, and Safety factor indicates that the periodic assessments must be completed once every five (5) years.

(d)(1)(v) A single spillway or a combination of spillways configured as specified in paragraph (d)(1)(v)(A) of this section. The combined capacity of all spillways must be designed, constructed, operated, and maintained to adequately manage flow during and following the peak discharge from the event specified in paragraph (d)(1)(v)(B) of this section (see Section 3.5);

(d)(1)(v)(A) All spillways must be either: (1) of non-erodible construction and designed to carry sustained flows; or (2) Earth- or grass-lined and designed to carry short-term, infrequent flows at non-erosive velocities where sustained flows are not expected (see Section 3.5);

(d)(1)(v)(B) The combined capacity of all spillways must adequately manage flow during and following the peak discharge from a: (1) probable maximum flood (PMF) for a high hazard potential CCR surface impoundment; or (2) 1000-year flood for a significant hazard potential CCR surface impoundment; or (3) 100-year flood for a low hazard potential CCR surface impoundment (see Section 3.5);

(d)(1)(vi) Hydraulic structures underlying the base of the CCR unit or passing through the dike of the CCR unit that maintain structural integrity and are free of significant deterioration, deformation, distortion, bedding deficiencies, sedimentation, and debris which may negatively affect the operation of the hydraulic structure (see Section 3.6); and

(d)(1)(vii) For CCR units with downstream slopes which can be inundated by the pool of an adjacent water body, such as a river, stream or lake, downstream slopes that maintain structural stability during low pool of the adjacent water body or sudden drawdown of the adjacent water body (see Section 3.7).

(d)(2) The periodic assessment described in paragraph (d)(1) of this section must identify any structural stability deficiencies associated with the CCR unit in addition to recommending corrective measures. If a deficiency or a release is identified during the periodic assessment, the owner or operator unit must remedy the deficiency or release as soon as feasible and prepare documentation detailing the corrective measures taken.

(d)(3) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the initial assessment and each subsequent periodic assessment was conducted in accordance with the requirements of this section.

**. ** COMMENT ON APPLICABILITY OF 40 CFR §257.73(D)(1)(iv):

§257.73(d)(1)(iv) was remanded with vacatur by the United States Court of Appeals for the District of Columbia Circuit on June 14, 2016. EPA published a proposed rule in the March 15, 2018, Federal Register with the stated intent, among three (3) other items, to

"determine the requirement for proper height of woody and grassy vegetation for slope protection." A public hearing on the rule was held in April 2018, However, EPA's final rule published in the July 30, 2018, Federal Register stated, "In this action, Agency will not be taking final action on any of the proposed amendments. As explained previously, provisions from the proposed rule that are not addressed in this action will be addressed in a subsequent rule-making action." However, there is no public record that a subsequent rule-making action" was ever proposed. Based on the above information, and recollection of the development of CCR requirements since 2016, GER's understanding, and conclusion are that the fly ash pond is currently not subject to the maximum vegetation height requirement stipulated in §257.73(d)(1)(iv).

2.0 FLY ASH POND DESCRIPTION

SPS is located west of the City of Sikeston, south of West Wakefield Avenue, and east of Route BB in Scott County, Missouri. The Fly Ash Pond at SPS resides to the east of SPS, and directly east of SPS's coal pile and north of the Bottom Ash Pond. The Fly Ash Pond occupies approximately 30 acres with a minimum and consistent berm elevation of 322+ feet.

SPS and the Fly Ash Pond are located at a transition between agricultural and urban areas. The Fly Ash Pond is surrounded by agricultural, commercial, and residential areas. Residential areas are located approximately 700 feet southeast of the Fly Ash Pond. Commercial areas are located approximately 1,700 feet east of the Fly Ash Pond. The remaining area around the Fly Ash Pond is agricultural land. There is City-owned property to the east, south, and west of the Fly Ash Pond. See Appendix A, Figure 1 – Aerial View, for a depiction of the Fly Ash Pond and Figure 2 – Fly Ash Pond Identified Deficiencies, for details of the Fly Ash Pond.

It is noted that the Fly Ash Pond was operating at the time of the initial structural stability assessment, but CCR solids have not been deposited in the Fly Ash Pond since April 2021. Therefore, the operational condition of the Fly Ash Pond changed since the initial structural stability assessment in 2018.

3.0 STRUCTURAL STABILITY ASSESSMENT

The Federal CCR Rule requires an initial and periodic structural stability assessment for existing CCR surface impoundments. Periodic structural stability assessments shall be conducted every five years. Structural stability assessments must document whether the design, construction, operation, and maintenance of the CCR surface impoundment is consistent with recognized and generally accepted good engineering practices. See Appendix A, Figure 1 – Aerial View, for a recent depiction of the Fly Ash Pond and Figure 2 – Fly Ash Pond Identified Deficiencies, for recent details of the Fly Ash Pond.

It is noted that the Fly Ash Pond was operating at the time of the initial structural stability assessment, but CCR solids have not been deposited in the Fly Ash Pond since April 2021. Therefore, the operational condition of the Fly Ash Pond changed since the initial structural stability assessment in 2018.

3.1 Foundations and Abutments

The foundation soils for the Fly Ash Pond consist of existing soils or fills compacted to support the finished construction of the Fly Ash Pond. Topsoil and soil with unsuitable material was stripped to a minimum depth of 6 inches. The stripped surface was further excavated or filled to the desired grades. The foundation soils beneath the berms of the Fly Ash Pond consist of silty sand (SM) and fine to medium coarse sand (SP) (Geotechnology 2011).

The foundation soils were designed to be compacted in accordance with the construction specifications to a 95% maximum density at optimum moisture for silty sands and 70% relative density for sands prior to the construction of any features of the Fly Ash Pond. The construction specifications may be found in the Sikeston Board of Municipal Utilities, Sikeston Power Station, Fly Ash Pond, History of Construction, Appendix C – Historical Construction Specifications (GER, 2018c).

No deficiencies were found during the assessment of the foundations and abutments of the Fly Ash Pond; therefore, no corrective measures are recommended.

3.2 Slope Protection

The Fly Ash Pond has sufficient slope protection on the interior and exterior slopes to protect against various methods of erosion which may cause detrimental effects to the berms of the Fly Ash Pond. The interior slopes of the fly ash pond are no longer exposed to surface erosion or wave action because the pond is inactive and is effectively full of fly ash. The exterior slopes of the Fly Ash Pond berms are protected from erosion by a thick, consistent grass vegetative cover.

No deficiencies were found during the assessment of the slope protection measures for the Fly Ash Pond; therefore, no corrective measures are recommended.

3.3 Berm Stability

The berms of the Fly Ash Pond were constructed on top of the prepared foundation soils. The berm fill material consists of fine sands and silty sands (SP and SM) (Geotechnology 2011). The berm fill materials were designed to be placed and compacted in accordance with the construction specifications to 70% relative density. The berms were constructed with a slope of 2 horizontal units to 1 vertical unit (2H:1V). The design finished top elevation of the berms was 322 feet. Aerial topographic surveys in the recent past show that the berm has a consistent elevation that ranges between 322.3 and 322.6.

A global stability evaluation was conducted by Geotechnology in 2011 on the Fly Ash Pond berms to provide information on the stability of the berms for decision making purposes. The evaluation included four borings in the berms of the Fly Ash Pond. The standard penetration tests for the borings equates to an average N value of 22 which correlates to a medium-dense compaction for

the berm material. An N value of 22 indicates the berms were mechanically compacted during construction.

The global stability evaluation assessed a range of loading conditions in the Fly Ash Pond. The evaluation was conducted for steady state seepage at normal pool (elevation 315.5 feet), steady state seepage at maximum pool (elevation 317 feet), and pseudo-static conductions for seismic loading (elevation 315.5 feet). The calculated factors of safety for each condition were determined to be 1.6 (steady state, normal pool) and 1.5 (steady state, maximum pool), and 1.2 (pseudo-static, normal pool) (Geotechnology 2011). A factor of safety less than 1 would indicate an unstable condition in the berms.

Based on the available geotechnical data and analyses of the Fly Ash Pond, it is determined the berms of the Fly Ash Pond were mechanically compacted to a density sufficient to withstand the range of loading conditions in the CCR unit. Additionally, no evidence has been found or observed that leads GER to believe the specifications were not followed.

The 2023 visual inspection of the berms of the Fly Ash Pond identified a similar small area of saturated soil along the southeastern berm of the Fly Ash Pond as observed in 2018. The wet ground conditions were observed to begin approximately midway on the exterior slope of the berm (approximate elevation of 314 feet) and continued to the toe of the exterior slope of the berm. The type of grass vegetation was visually observed to change along a horizontal line on the exterior slope of the berm that generally matched the beginning of the wet conditions.

The presence of hydric plants indicate that the wet condition of the soil may be the result of seepage through the southeastern berm from the Fly Ash Pond. However, no visible flow was observed and stability analysis of critical sections of Fly Ash Pond berms by Reitz & Jens, as a sub-consultant to GER, reportedly exceed the minimum Factors of Safety required by the CCR rule.

Based on the observations and rationale described above, the wet, saturated soil condition is identified as a deficiency under the rule. Consistent with recognized and generally accepted good engineering practices, it would be recommended that SPS complete corrective measures to further evaluate the potential seepage through the southeast berm of the Ash Pond. However, since the Fly Ash Pond is inactive and is scheduled to begin closure in 2024, corrective measures are no longer considered to be necessary.

3.4 Maximum Vegetation Height Requirement

The maximum vegetative height requirement specified in §257.73(d)(1)(iv) was remanded with vacatur by the United States Court of Appeal for the District of Columbia Circuit on June 14, 2016. Therefore, the Fly Ash Pond is not currently subject to this requirement [** SEE COMMENT ON APPLICABILITY AT THE END OF SECTION 1.1].

3.5 Spillway Design and Capacity

The Fly Ash Pond was constructed with an outlet structure in the northwest corner of the pond with discharge pipes through the Fly Ash Pond's northern and western berms. The outlet structure consisted of a concrete structure with the water level controlled by stop logs. The overflow water can be diverted to the southern stormwater ditch along West Wakefield Avenue through Outlet #1, or to the Process Waste Pond through Outlet #2.

Outlet #1 is a 24-inch steel pipe, which discharges from an approximate 6-feet by 17-feet concrete vault. The discharge from the concrete vault is through a 24-inch corrugated steel pipe which discharges onto an 18-inch riprap lined, 6-foot flat bottom ditch prior to the stormwater ditch along West Wakefield Avenue. The overall length of Outlet #1 is 62 feet.

Outlet #2 is a 24-inch corrugated metal pipe (CMP) (inlet and discharge elevations of 316.75 feet and 307.0 feet) with an overall length of 916 feet. Outlet #2 discharges onto a 10-foot-wide concrete spillway into the Process Waste Pond.

The hazard potential classification for the Fly Ash Pond was determined by modeling a worst-case probable scenario breach of the Fly Ash Pond Berms and its resulting flood waters impact on the surrounding land using HydroCAD. Based on the HydroCAD model, the Fly Ash Pond at SPS was classified as low. As stated above, §257.73(d)(1)(v)(B)(2) requires the inflow design flood for CCR surface impoundments with low hazard potential classifications to be the 100-year flood (GER, 2018a and 2023a). The 100-year flood is the volume of runoff generated by the 100-year rainfall event for a given location. The 100-year, 24-hour rainfall event was modeled to determine if the existing Fly Ash Pond and its associated discharge structures are negatively impacted by the discharge from the Fly Ash Pond. From the National Oceanic and Atmospheric Administration (NOAA) Atlas 14, Volume 8, Version 2, the 100-year, 24-hour precipitation event for Sikeston, Missouri, is 8.44 inches of rainfall.

The peak discharge from the 100-year storm event was previously determined to be 146 cubic feet per second (CFS). However, there are no open discharge structures in the inactive Fly Ash Pond, so the peak discharge from the 100-year flood as the 100-year storm event will be detained within the Fly Ash Pond with a peak elevation of 320.5 feet. During the peak flow of the 100-year 24-hour storm event, the maximum elevation from the rainfall event was determined to be 320.5 feet, which is 1.9 feet below the top of the Fly Ash Pond berms (elevation 322+ feet). Therefore, the Fly Ash Pond has adequate hydrologic and hydraulic capacity to manage flow during and following the peak discharge from the inflow design flood, as required by §257.73(d)(1)(v) (GER, 2018b and 2023b).

One hydraulic deficiency has been noted during past assessments of the Fly Ash Pond. The emergency spillway (a 30-inch CMP pipe) between the Bottom Ash Pond and the Fly Ash Pond has been inoperable since GER's observations began in 2016. The pipe is due to excess fly ash at the discharge of the 30-inch corrugated metal pipe impeding the flow path between the two

ponds. Consistent with recognized and generally accepted good engineering practices, it has been recommended in the past that SPS complete corrective measures to either remove the accumulated CCR from the discharge end of the overflow structure, or construct an alternate overflow structure (i.e., emergency spillway) capable of adequately managing flow during and following the peak discharge from the design flood event. However, since the Fly Ash Pond has been inactive since 2021 and is scheduled to begin closure in 2024, corrective measures are no longer considered to be necessary.

3.6 Structural Integrity of Hydraulic Structures

As stated above, §257.73(d)(1)(vi) requires the structural integrity of hydraulic structures passing through or beneath a CCR surface impoundment to be maintained in a manner to prevent conditions which negatively affect the operation of the hydraulic structure.

3.6.1 Identified Hydraulic Structures

The Fly Ash Pond has three hydraulic structures that pass through the berms, but no hydraulic structures pass beneath the CCR surface impoundment. Hydraulic structures passing through the berms of the Fly Ash Pond Include:

- Outlet Structure #1: The 24-inch steel pipe passing through the northern berm drains to an overflow monitoring structure outside the berm, which then drains to an open channel parallel to West Wakefield Avenue. The pipe has an invert elevation of approximately 316.42 feet and is permanently closed.
- Outlet Structure #2: 24-inch corrugated metal pipe passing through the western berm of the Fly Ash Pond, discharging into the Process Waste Pond (approximate 316.75 feet invert elevation) is permanently closed.
- Emergency Spillway: 30-inch corrugated metal pipe passing through the southern berm of the Fly Ash Pond, discharging stormwater to the Bottom Ash Pond is impeded by sedimented CCR material.

3.6.2 Structural Integrity of Identified Hydraulic Structures

A visual inspection was conducted of each hydraulic structure passing through or beneath the berms of the Fly Ash Pond, where visible, for structural integrity, significant deterioration and deformation, distortion, bedding deficiencies, sedimentation, and debris which may negatively impact the operation of the hydraulic structure. The results of the visual inspection are described below.

- Outlet Structure #1: The inlet of the 24-inch steel pipe was not identified due to the valve being closed. The inoperable outlet structure is not determined to be a deficiency because

the Fly Ash Pond is inactive and is scheduled to begin closure in 2024, corrective measures are no longer considered necessary.

- Outlet Structure #2: The concrete discharge structure serving the 24-inch steel and CMP pipes appeared in good condition with no visual signs of deterioration. The inlet of the 24-inch CMP pipe was behind a closed valve and therefore not directly observed. The control valve serving the discharge was observed to be in poor condition and was reported to have not been recently operated per plant personnel. However, the Fly Ash Pond is inactive and is scheduled to begin closure in 2024, therefore, corrective measures are not considered necessary.
- Emergency Spillway: The 30-inch CMP between the Fly Ash Pond and Bottom Ash Pond is not used due to the adequate capacity of the Fly Ash Pond. The emergency spillway would require removal of accumulated CCR in order to render the structure usable in the future. However, the Fly Ash Pond is inactive and is scheduled to begin closure in 2024, therefore, corrective measures are not considered necessary.

3.7 Downstream Inundation and Sudden Drawdown

As stated above, §257.73(d)(1)(vii) requires the structural integrity of the CCR unit must be maintained during low pool of the adjacent water body or sudden drawdown of the adjacent water body. The Fly Ash Pond berms are not subject to inundation by an adjacent water body in accordance with the Federal Emergency Management Agency (FEMA) Floodplain Map (FM) 29201C0315D. Therefore, this rule is not applicable, and the structural integrity of the Fly Ash Pond was not assessed for low pool or sudden drawdown of an adjacent water body.

3.8 Miscellaneous Assessed Site Features

One site feature is present in or near the Fly Ash Pond to be assessed for impact on the structural stability of the Fly Ash Pond. Electrical manholes were identified on the southern berm of the Fly Ash Pond. The manholes are reported by SPS personnel to support the original power supply that powered the original scrubber sludge pump station located in the northeast corner of the Bottom Ash Pond. The electrical manholes and the associated electrical conduit run parallel to the centerline of the berm, but they do not pass through the berm and therefore are not found to be detrimental to the structural integrity of the Fly Ash Pond Berms.

4.0 RECOMMENDED CORRECTIVE MEASURES SUMMARY

As stated above, §257.73(d)(2) pertaining to CCR surface impoundments states each periodic assessment must identify any structural stability deficiencies associated with the CCR surface impoundment and recommend corrective measures. A summary of the identified deficiencies and recommended corrective measures are provided below:

- A small area of wet/saturated soil was identified along the exterior of the eastern berm of the Fly Ash Pond. The wet area was observed a few feet above the toe of the exterior slope of the berm inside of and above the stormwater swale railroad track. The small area was manifested as a patch of hydrophilic plants (e.g., cattails). Therefore, GER has identified this condition as a potential CCR rule deficiency and recommends that SPS observe this condition to assure it does not worsen over time.

- Although not identified as a CCR rule deficiency, generally accepted engineering practices for surface impoundments typically include secondary discharge structures or spillways to be used in cases of excessive flow or in the event a surface impoundment's active spillway is rendered inoperable. Currently, the Fly Ash Pond has no emergency discharge structures. However, the Fly Ash Pond is inactive and is scheduled to begin closure in 2024, therefore, corrective measures are not considered necessary.

5.0 MISCELLANEOUS REQUIREMENTS

Section 257.73(g) states that SPS must comply with:

- The recordkeeping requirements specified in 257.105(f);
- The notification requirements specified in 257.106(f); and,
- The Internet requirements specified in 257.107(f).

6.0 REFERENCES

Geotechnology Inc., 2011. “Global Stability Evaluation Fly Ash and Bottom Ash Ponds Sikeston Power Station Sikeston, Missouri.”

GREDELL Engineering Resources, Inc., 2018a. “Sikeston Board of Municipal Utilities Sikeston Power Station Fly Ash Pond Hazard Potential Classification Assessment.”

GREDELL Engineering Resources, Inc., 2018b. “Sikeston Board of Municipal Utilities Sikeston Power Station Fly Ash Pond Inflow Design Flood Control System Plan.”

GREDELL Engineering Resources, Inc., 2018c. “Sikeston Board of Municipal Utilities Sikeston Power Station Fly Ash Pond History of Construction.”

GREDELL Engineering Resources, Inc., 2023a. “Sikeston Board of Municipal Utilities Sikeston Power Station Fly Ash Pond Hazard Potential Classification Assessment.”

GREDELL Engineering Resources, Inc., 2023b. “Sikeston Board of Municipal Utilities Sikeston Power Station Fly Ash Pond Inflow Design Flood Control System Plan.”

GREDELL Engineering Resources, Inc., “Annual P.E. Inspections of Fly Ash Pond, 2018 through 2023.”

Sikeston Board of Municipal Utilities, Renewed 2/1/2023: “Sikeston Power Station Missouri State Operating Permit, MO-0095575.”

APPENDIX A

Figures

N

SCALE: 1" = 1500'
0 750 1500

NOTES:
1. PROPERTY LINE TAKEN FROM THE SCOTT COUNTY ASSESSOR'S WEBSITE (SCOTTGIS.COUNTYPORTAL.NET) 6-8-15
2. IMAGE PROVIDED BY BING MAPS 2023 IMAGE.

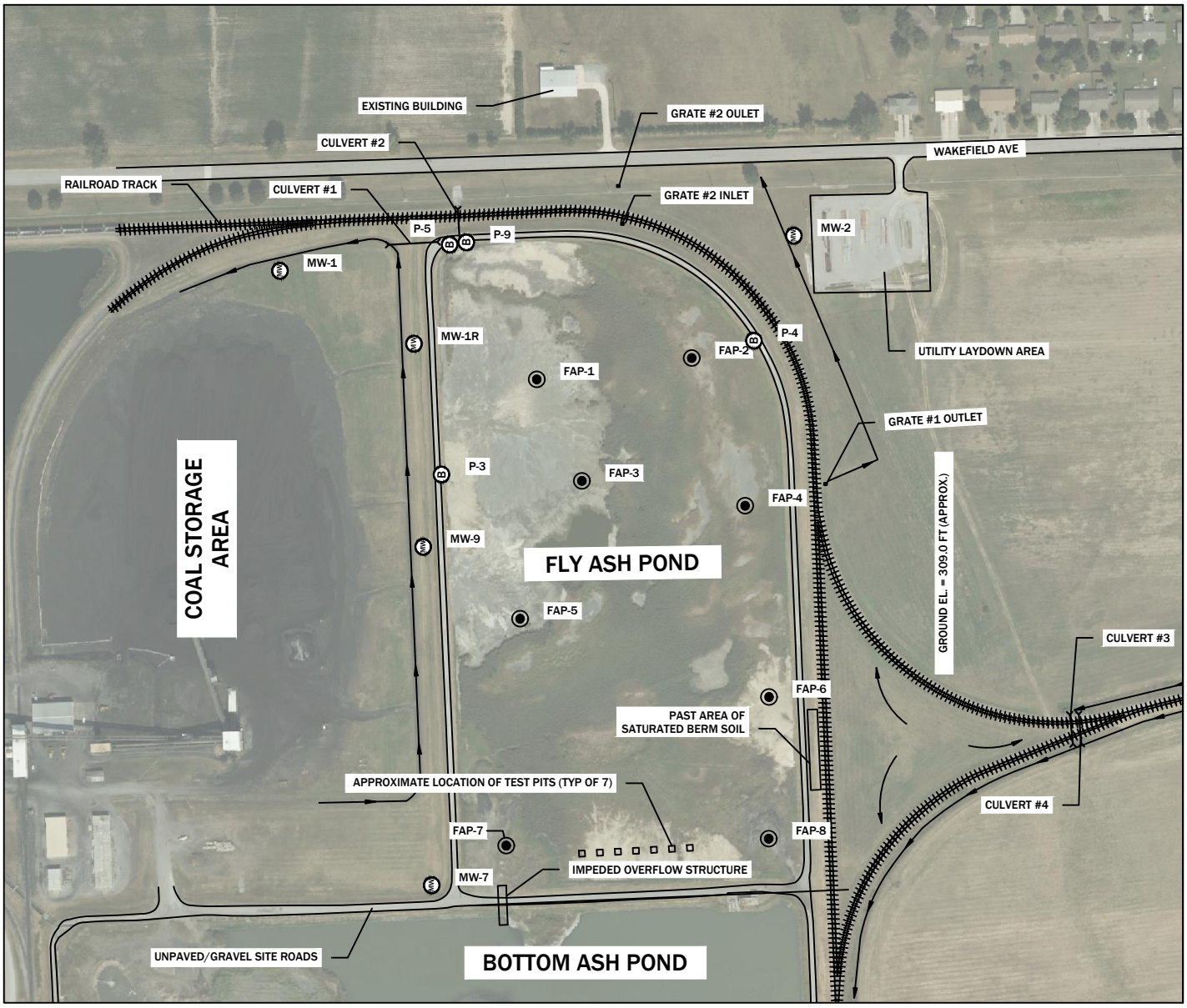
LEGEND
SBMU PROPERTY LINE (APPROXIMATE) — PL —
SIKESTON RIDGE
DRAINAGE FEATURE

PERIODIC STRUCTURAL STABILITY ASSESSMENT FLY ASH POND SIKESTON POWER STATION

FIGURE 1 - AERIAL VIEW

GREDELL ENGINEERING RESOURCES
CIVIL • GEOTECHNICAL • ENVIRONMENTAL • GEOLOGY • EARTH SCIENCES
1505 East High Street
Jefferson City, Missouri
Telephone: (573) 659-9078
Facsimile: (573) 659-9079
MO CORP. ENGINEERING LICENSE NO. E-2001001669-D

DATE	SCALE	PROJECT NAME	REVISION
01/2024	1" = 1500'	SIKESTON FAP 5-YEAR UPDATE	N/A
DRAWN	APPROVED	FILE NAME	SHEET #
CM	TRG	BASE-SITE-02	1 OF 2



N

SCALE: 1" = 400'

0 200' 400'

LEGEND:

- INTERNAL PIEZOMETER — FAP-1
- MONITORING WELLS — MW-7
- FLUSH MOUNT PIEZOMETER (GEOTECHNOLOGY (2011)) — P-3
- APPROXIMATE PAST TEST PIT LOCATIONS
- RAILROAD TRACKS
- DIRECTION OF STORMWATER FLOW

NOTES:

1. INTERNAL PIEZOMETERS INSTALLED IN 2022
2. PIEZOMETER LOCATIONS APPROXIMATED WITH HANDHELD GPS.
3. IMAGE PROVIDED BY MICROSOFT BING MAPS; APPROXIMATE IMAGE DATE 2022.
4. POTENTIAL DEFICIENCIES INCLUDE: PAST AREA OF SATURATED BERM SOIL AND IMPEDED OVERFLOW STRUCTURE (SEE REPORT FOR DETAILED DISCUSSION.)

PERIODIC STRUCTURAL STABILITY ASSESSMENT
FLY ASH POND
SIKESTON POWER STATION

FIGURE 2 - FLY ASH POND IDENTIFIED DEFICIENCIES

GREDELL ENGINEERING RESOURCES
CIVIL • GEOTECHNICAL • ENVIRONMENTAL • GEOLOGY • EARTH SCIENCES
1505 East High Street
Jefferson City, Missouri
Telephone: (573) 659-9078
Facsimile: (573) 659-9079
MO CORP. ENGINEERING LICENSE NO. E-2001001669-D

DATE	SCALE	PROJECT NAME	REVISION
02/2024	1" = 400'	SIKESTON FAP 5-YEAR UPDATE	N/A
DRAWN	**APPROVED**	**FILE NAME**	**SHEET #**
BM	TRG	BASE-SITE-05	2 OF 2