



Bullock, Bennett & Associates, LLC

www.bbaengineering.com
165 N. Lampasas St. • Bertram, Texas 78605 • (512) 355-9198

ANNUAL CCR UNITS INSPECTION

SAN MIGUEL ELECTRIC COOPERATIVE, INC.

January 8, 2021

Prepared for:

San Miguel Electric Cooperative, Inc.
6200 FM 3387
Christine, Atascosa County, Texas 78012

Prepared by:

BULLOCK, BENNETT & ASSOCIATES, LLC
165 N. Lampasas St., Bertram, Texas 78605
www.bbaengineering.com

Texas Engineering Firm Registration: F-8542

Texas Geoscience Firm Registration: 50127

BBA Project No. 20379

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION	2
2.0 CCR UNIT DESCRIPTIONS.....	3
3.0 ANNUAL INSPECTION REQUIREMENTS	4
4.0 INSPECTION FINDINGS	6

Tables:

Table 1 – CCR Unit Finding Summary

Table 2 – Inspection Results: Ash Ponds and Equalization Ponds

Table 3 – Inspection Results: Ash Pile

Figures:

Figure 1 – Site Map

Figure 2 – Ash Ponds A and B, South EB Inspection Photos (Dec 2020)

Figure 3 – Ash Ponds A and B, South EB Inspection Photos (Dec 2020)

Figure 4 – East EP Inspection Photos (Dec 2020)

Figure 5 – East EP Inspection Photos (Dec 2020)

Figure 6 – Ash Pile Inspection Photos (Dec 2020)

Figure 7 – Ash Pile Inspection Photos (Dec 2020)

1.0 INTRODUCTION

Bullock, Bennett, and Associates, LLC (BBA) was retained by the San Miguel Electric Cooperative, Inc. (SMECI) to perform their annual Coal Combustion Residuals (CCR) Units Inspection. The SMECI lignite-fired 440-megawatt (MW) power plant and associated mining facilities are located approximately six miles south of Christine, in Atascosa County in South Texas. CCR Units Inspection standards and guidance are set forth under the United States Environmental Protection Agency (USEPA) CCR Rule, 40 Code of Federal Regulations (CFR) §257.83(b) and §257.84(b), for surface impoundments and landfills, respectively. The federal CCR rules have been recently adopted by the Texas Commission on Environmental Quality (TCEQ) under 30 Texas Administrative Code (TAC) Chapter 352. The intent of this annual inspection is to summarize the visual observations made during the December 1, 2020 on-site inspection and provide the reader an engineering opinion on the condition, structural integrity, operational status, and maintenance of the CCR Units in accordance with the cited regulations.

As further described in later sections herein, the CCR Units inspected and reported on for this annual inspection report consists of the East Equalization Pond, the South Equalization Basin, Ash Pond A, and Ash Pond B, which are each regulated under the CCR rules as Surface Impoundments, and the Ash Pile which is covered under the CCR Landfill rules.

Ash Pond B was recently partitioned into two sections, Ash Pond B and a new equalization pond. For distinction from the existing equalization pond, the new equalization pond will be referenced herein as the South Equalization Basin and the existing equalization pond will be referenced as the East Equalization Pond. The table below provides a brief summary of inspection findings.

Table 1 – CCR Unit Finding Summary

CCR Unit	CCR Section Reference	Section Summary	CCR Unit Inspection Status
East Equalization Pond (existing equalization pond)	§257.83(b)(1)	Annual Inspection	Requirements Met
	§257.83(b)(2)	Inspection report	Requirements Met
	§257.83(b)(3)	Inspection Frequency	Requirements Met
	§257.83(b)(4)	Observed Deficiencies	None
Ash Ponds A and B, and South Equalization Basin (the new equalization pond)	§257.83(b)(1)	Annual Inspection	Requirements Met
	§257.83(b)(2)	Inspection report	Requirements Met
	§257.83(b)(3)	Inspection Frequency	Requirements Met
	§257.83(b)(4)	Observed Deficiencies	None
Ash Pile	§257.84(b)(1)	Annual Inspection	Requirements Met
	§257.84(b)(2)	Inspection report	Requirements Met
	§257.84(b)(3)	Inspection Frequency	Requirements Met
	§257.84(b)(4)	Observed Deficiencies	None

2.0 CCR UNIT DESCRIPTIONS

The CCR Units are as shown in Figure 1 and briefly described below:

- **Ash Ponds A and B, and South Equalization Basin**

Ash Ponds A and B and the South Equalization Basin comprise a single impoundment structure (the Pond) with internal dividing dikes which serve to form the individual units. The Pond is located on the south portion of the plant property and the associated pump station is located to the west of the Pond. The Pond was designed and constructed as a side-hill impoundment with the north embankment at or near natural grade. The Pond is partitioned into three units, Ash Pond A, Ash Pond B and the South Equalization Basin. The Pond has a centrally located dike oriented from west to east that separates Ash Pond A on the north side of the dike, from Ash Pond B and the South Equalization Basin on the south side of the dike. A centrally located, north-south oriented, dike then separates Ash Pond B from the South Equalization Basin. The Pond's staff gauge is located in the southeast corner of Ash Pond A, on the weir that separates Ash Pond A from Ash Pond B.

Ash Pond A and Ash Pond B (prior to partitioning of Ash Pond B) were completely emptied in 2020 and an engineer-designed high-density polyethylene (HDPE) flexible membrane liner (FML) system was installed prior to the 2020 annual engineering inspection. SMECI personnel indicated the existing Pond bottom and dike side slope elevations were not altered as part of the work and remain approximately the same as they were prior to upgrade activities. Ash Pond B was partitioned via construction of a lined separator dike located near the middle of former Ash Pond B. The east portion of this partition is still referred to and functions as Ash Pond B, while the west portion is now the South Equalization Basin. At the time of the inspection, Ash Pond A was in full operating status while Ash Pond B and the South Equalization Basin were undergoing final FML placement welding and had not yet been placed into service.

The perimeter of the Pond is approximately 5,750 feet with an approximate surface area of 26 acres. Based on the 2019 engineering design drawings (Newfields, 8/29/2019) for liner upgrades, the maximum pond depth is approximately 21 feet from the bottom elevation of 295.0 (NAVD88) to the top of the one foot thick clay layer (elevation 316.0 NAVD88) on the dike crest, underlying a 6-inch thick access road base material. The top of road base material is at elevation 316.5 (NAVD88). Interior side slopes are constructed at 2.5(Horizontal):1(Vertical) and exterior slopes range from 2.5(H):1(V) to 3(H):1(V). The normal pool water surface elevation is 313.0 feet (NAVD88). The crest is over 10 feet wide.

- **East Equalization Pond**

The East Equalization Pond is located on the east side of the plant property with a perimeter of approximately 4,500 feet. The East Equalization Pond depth is approximately 16.5 feet with a surface area of approximately 25 acres. The dike has a crest width generally over 10 feet and 3(H):1(V) exterior side slopes. The dike crest elevation is approximately 295 feet (NAVD88) with a normal pool level gauge elevation

of approximately 293 feet (NAVD88). The staff gauge for the Pond is located in the southwest corner.

SMECI plant personnel indicated during the on-site inspection that the East Equalization Pond will be dewatered, decommissioned and capped in-place in 2021.

- **Ash Pile**

The Ash Pile is located in the northwest portion of the plant just north of the Ash Silos. The Ash Pile is considered a temporary storage area approximately 1 acre in size and is used to stage a stabilized mixture of fly ash and flue gas desulfurization (FGD) scrubber waste treatment sludge. The ash mixture is staged within concrete and metal walls awaiting transport, via dump trucks, to the San Miguel surface lignite mines located southeast outside of the power plant boundary.

In 2018 SMECI adopted a new dust control procedure that included the addition of sprinklers and a chemical reagent to minimize dust migration. There is no permanently constructed cover over the Ash Pile due to the repetitive dump truck routes loading and hauling the Ash off-site.

3.0 ANNUAL INSPECTION REQUIREMENTS

The following subsections outline the annual inspection requirements applicable to the CCR Units at the power plant. It is noted that information about operational and maintenance procedures were provided by SMECI plant personnel. SMECI personnel monitor the CCR Units on a regularly scheduled basis allowing for timely resolution of any identified maintenance needs.

3.1 Ash Ponds A and B, South Equalization Basin and East Equalization Pond

The annual inspection requirements for the equalization ponds and ash ponds are the same. Each is subject to annual inspection by a qualified engineer, pursuant to 40 CFR §257.83(b)(1), “...to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards”. Components of the inspection are described below:

- 40 CFR &257.83(b)(1)(i) – *A review of available information regarding the status and condition of the CCR unit, including, but not limited to, files available in the operating record (e.g., CCR unit design and construction information required by §257.73 (c)(1) and §257.74 (c)(1), previous periodic structural stability assessments required under §257.73 (d) and §257.74 (d), the results of inspections by a qualified person, and results of previous annual inspections).*
- 40 CFR §257.83(b)(1)(ii) – *A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit.*

Inspection results are documented based on the reporting requirements outlined in 40 CFR §257.83(b)(2). Those requirements are outlined below:

- (i) - Any changes in geometry of the impounding structure since the previous annual inspection.
- (ii) - The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection
- (iii) - The approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous annual inspection
- (iv) - The storage capacity of the impounding structure at the time of the inspection.
- (v) - The approximate volume of the impounded water and CCR at the time of the inspection.
- (vi) - 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.
- (vii) - Any other change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection.

The following subsections outline the inspection frequency for the equalization ponds and ash ponds covered under 40 CFR §257.83(b)(4).

(i) - Except as provided for in paragraph (b)(4)(ii) of this section, the owner or operator of the CCR unit must conduct the inspection required by paragraphs (b)(1) and (2) of this section on an annual basis. The date of completing the initial inspection report is the basis for establishing the deadline to complete the first subsequent inspection. Any required inspection may be conducted prior to the required deadline provided the owner or operator places the completed inspection report into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing subsequent inspection reports is based on the date of completing the previous inspection report. For purposes of this section, the owner or operator has completed an inspection when the inspection report has been placed in the facility's operating record as required by §257.105 (g)(6).

3.2 Ash Pile

The Ash Pile is subject to annual inspection by a qualified engineer, pursuant to 40 CFR §257.84(b)(1), "...to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards". Components of the inspection are described below:

- 40 CFR §257.84(b)(1)(i) – A review of available information regarding the status and condition of the CCR unit, including, but not limited to, files available in the operating record (e.g., the results of inspections by a qualified person, and results of previous annual inspections).
- 40 CFR §257.84(b)(1)(ii) – A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit.

Results of the inspection must be documented pursuant to the inspection reporting requirements of 40 CFR §257.84(b)(2):

- (i) - Any changes in geometry of the structure since the previous annual

inspection.

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

(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.

(iv) Any other change(s) which may have affected the stability or operation of the CCR unit since the previous annual inspection.

The following subsections outline the inspection frequency for the Ash Pile covered under 40 CFR §257.84(b)(4).

The owner or operator of the CCR unit must conduct the inspection required by paragraphs (b)(1) and (2) of this section on an annual basis. The date of completing the initial inspection report is the basis for establishing the deadline to complete the first subsequent inspection. Any required inspection may be conducted prior to the required deadline provided the owner or operator places the completed inspection report into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing subsequent inspection reports is based on the date of completing the previous inspection report. For purposes of this section, the owner or operator has completed an inspection when the inspection report has been placed in the facility's operating record as required by §257.105(g)(9).

4.0 INSPECTION FINDINGS

BBA performed the most recent inspection at the SMECI power plant on December 1, 2020. A qualified engineer performed the CCR Unit inspection and SMECI personnel provided guidance and direction to BBA's questions. During the inspection, the CCR Units were readily accessible and free of obstructions. SMECI provided BBA with past CCR Unit Annual Inspection reports and design documents for review.

During the inspection, Ash Pond A was the only ash pond in operation. Ash Pond B was out of service and had only minimal rain water accumulation on portions of the bottom from a recent rain event that occurred a few days prior to inspection. As previously described in Section 2.0, Ash Pond B was partitioned into the Ash Pond B and South Equalization Basin. This was performed in preparation of the East Equalization Pond decommissioning activities forecasted for 2021. The East Equalization Pond will be dewatered and liquid pumped to Ash Pond B. After the East Equalization Pond is dewatered and prepared for capping, it will be capped in place with an engineered-cap liner system.

Previous Annual CCR Unit Inspection Reports have identified wet areas in the low-lying drainage areas outside of the East Equalization Pond. One area to the northeast and another to the south. At the time of the on-site visual inspection, an interceptor trench had recently been installed to drain the areas immediately north and east of the pond. The purpose of the interceptor trench is to capture shallow surface water historically ponding in this area. The surface water will be collected in the interceptor trench and pumped away to maintain drier site conditions. During the site visit this area was disturbed due to ongoing construction activities, soils were moist due to recent rainfall, but there was no significant ponding in the area. An

additional wet area historically observed on site is located immediately south of the East Equalization Pond, in a low-lying surface water drainage feature. The wet conditions in this area reportedly stems, in part, from a broken concrete pipe from a water well that supplies water to the facility's Raw Water Pond. This area was observed to have shallow areas of localized ponding at the time of inspection, likely primarily due to recent rainfall prior to the inspection.

Table 2 - Inspection Results: Ash Ponds and Equalization Ponds

Regulatory Citation	<i>Ash Ponds A and B, and South Equalization Basin</i>	<i>East Equalization Pond</i>
<i>40 CFR §257.83 (b)(2) (i) - Any changes in geometry of the impounding structure since the previous annual inspection.</i>	Ash Pond B was partitioned in 2020, with a separator dike installed near the mid-point, creating a smaller Ash Pond B in the east partition and the South Equalization Basin in the west partition. Additionally, Ash Pond A, Ash Pond B, and the South Equalization Basin have been lined (bottom and interior side slopes) with a 60-mil HDPE FML system. The partition and liner upgrade system engineering design was prepared by Newfields of Atlanta, Georgia and is dated August 2019. As-built documents are reportedly currently being prepared and were not available at the time of this inspection.	No changes in geometry were noted when compared to the 2019 inspection report.
<i>40 CFR §257.83 (b)(2) (ii) - The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection.</i>	A staff gauge has been installed in the southeast corner of Ash Pond A, near the overflow weir to Ash Pond B. The maximum recorded water surface elevation reading since the previous annual inspection is 315.0 (NAVD88).	A staff gauge is located in the southwest corner of the East Equalization Pond. The maximum recorded reading since the previous annual inspection is 294.7 (NAVD88).
<i>40 CFR §257.83 (b)(2)(iii) - The approximate minimum, maximum, and present depth and elevation of the</i>	<u>Approximate Depth (ft) / Elevation (NAVD88)</u>	<u>Approximate Depth (ft) / Elevation (NAVD88)</u>

<p><i>impounded water and CCR since the previous annual inspection</i></p>	<p style="text-align: center;"><u>Water</u></p> <p>Min.: 18.0 / 313.0 Max.: 20.0 / 315.0 Present: 19.6 / 314.6</p> <p style="text-align: center;"><u>CCR</u></p> <p>Min.: 0.0 / 295.0 Max.: 18.0 / 313.0 Present: 18.0 / 313.0</p>	<p style="text-align: center;"><u>Water</u></p> <p>Min.: 13.8 / 290.3 Max.: 18.2 / 294.7 Present: 17.0 / 293.5</p> <p style="text-align: center;"><u>CCR</u></p> <p>Min.: 13.8 / 290.3 Max.: 18.2 / 294.7 Present: 17.0 / 293.5</p>
<p><i>40 CFR §257.83 (b)(2)(iv) - The storage capacity of the impounding structure at the time of the inspection.</i></p>	<p>The storage capacity was estimated to be 432 acre-feet prior to construction of the partition dike. The partition dike volume is estimated to be 11 acre-feet, therefore the adjusted estimated capacity of the unit is 421 acre-feet.</p>	<p>The storage capacity is estimated to be 410 acre-feet.</p>
<p><i>40 CFR §257.83 (b)(2)(v) - The approximate volume of the impounded water and CCR at the time of the inspection</i></p>	<p>The approximate volume of impounded water at the time of the inspection was 213,300 cubic yards (cy). The estimated volume of CCR at the time of the inspection was estimated at 800 cy.</p>	<p>The approximate volume of impounded water at the time of the inspection was 100,200 cubic yards (cy). The estimated volume of CCR at the time of the inspection was estimated at 533,300 cy.</p>
<p><i>40 CFR §257.83 (b)(2)(vi) – 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.</i></p>	<p>None observed.</p>	<p>None observed.</p>
<p><i>40 CFR §257.83 (b)(2)(vii) – Any other change(s) which may have affected the stability or operation of the impounding structure since the previous annual</i></p>	<p>None observed.</p>	<p>None observed.</p>

<i>inspection.</i>		
<p>Maintenance Items:</p> <p>BBA observed items to be addressed as part of standard ongoing maintenance, including the following:</p> <ul style="list-style-type: none"> • Clean the staff gauges (both locations) of solids build-up to facilitate water surface readings. • Address minor erosion rills observed at various locations on the exterior dikes of the ash ponds and equalization ponds. • Address minor rutting observed on the perimeter access roads. • Address localized areas with sparse vegetation due to new work activities. • Repair a leaking pipe feed to the Raw Water Pond (reportedly already addressed upon this writing). • Continue vegetation control program. • Continue removal of ant beds when observed. • Continue inspection and realignment as-needed of riprap materials along the exterior toe of the East Equalization Pond (adjacent to the low-lying drainage feature). • Continue maintenance grading of the perimeter surface water drainage feature along the toe of the East Equalization Pond as-needed to prevent ponding of surface water. <p>BBA will provide additional detail to assist SMECI in implementation of these ongoing maintenance items on an as-needed basis.</p>		

The results of the 2020 Annual Inspection for the Ash Pile are presented, as follows:

Table 3 - Inspection Results: Ash Pile

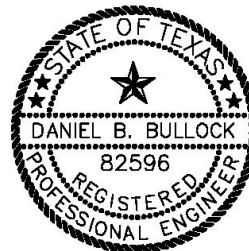
Regulatory Citation	Ash Pile
<i>40 CFR §257.84 (b)(2)(i) – Any changes in geometry of the structures since the previous annual inspection.</i>	None observed.
<i>40 CFR §257.84 (b)(2)(ii) – The approximate volume of CCR contained in the unit at the time of the inspection.</i>	2,000 cy
<i>40 CFR §257.84 (b)(2)(iii) – Any appearances of an actual or potential structural weakness of the CCR unit, in</i>	None observed.

<i>addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit.</i>	
<i>40 CFR §257.84 (b)(2)(iv) – Any other change(s) which may have affected the stability or operation of the CCR unit since the previous annual inspection.</i>	None observed.
<p><u>Maintenance Items:</u></p> <ul style="list-style-type: none"> • Continue maintenance grading as-needed to maintain drainageways. • Continue to maintain access haul roads in the area of the storage pile. 	

I, Dan Bullock, certify under penalty of law that the information submitted in this report 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 Texas. The information submitted, is to the best of my knowledge and belief, true, accurate and complete. Based on the annual inspection, the design, construction, operation, and maintenance of the CCR Unit is consistent with recognized and generally accepted good engineering standards.



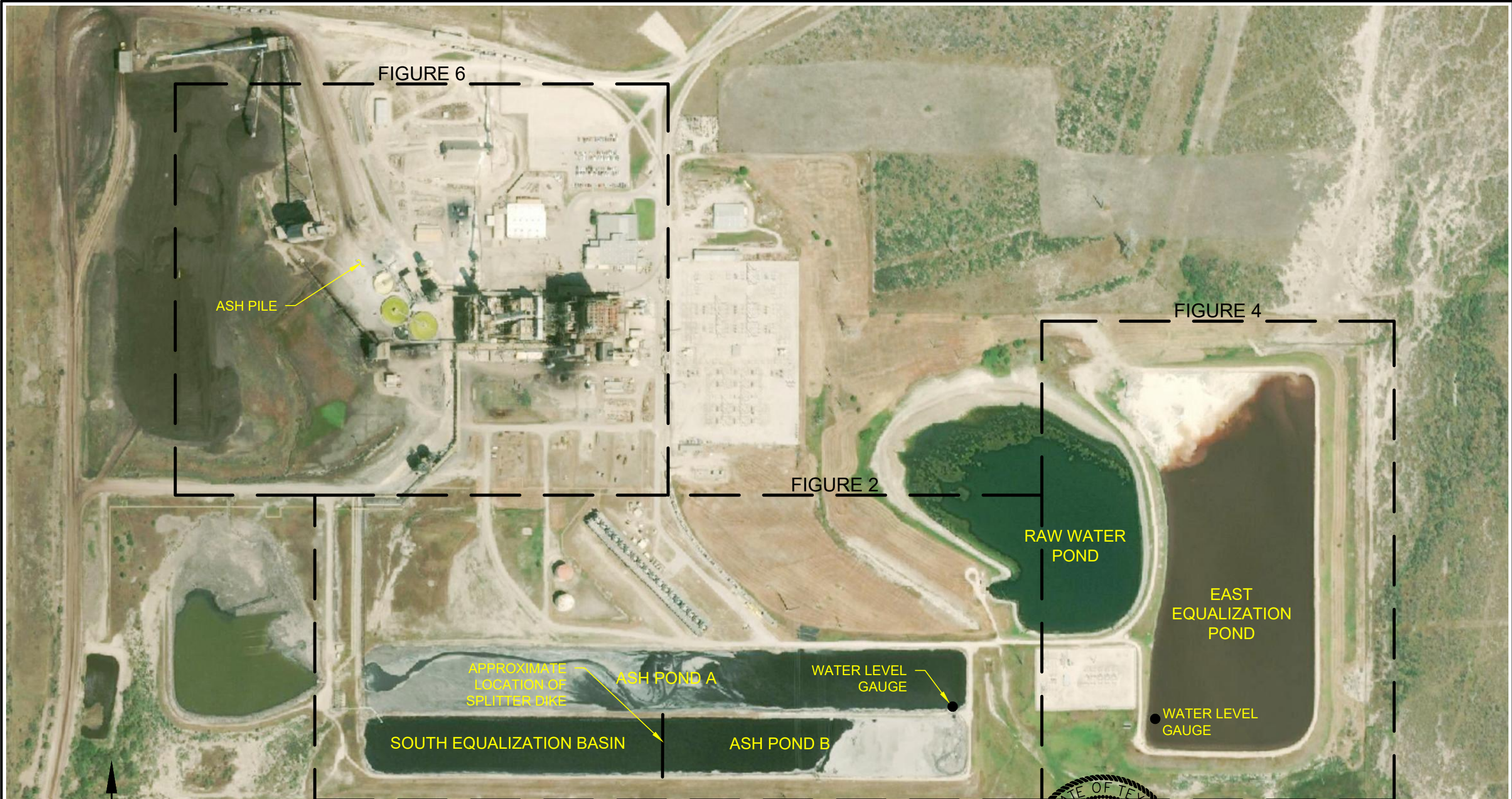
Dan Bullock, PE
Texas PE No. 82596, Expires: 06/30/2021
Date: 1/8/2021



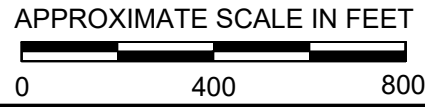
1/8/2021

ATTACHMENTS

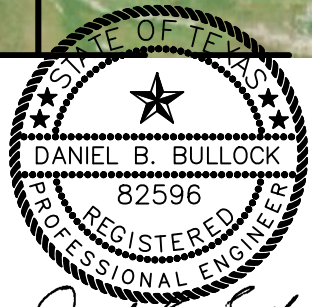
- Figures 1-7



Plot Date: 01/08/21 - 9:41am, Plotted by: Admin
 Drawing Path: K:\clients\bbat\San Miguel\20379, Drawing Name: C-ST-PL101.dwg



SOURCE: AERIAL BACKGROUND PROVIDED BY BING MAPS.



Daniel B. Bullock
1-8-2021

San Miguel Electric Cooperative Inc.
Atascos County, Texas

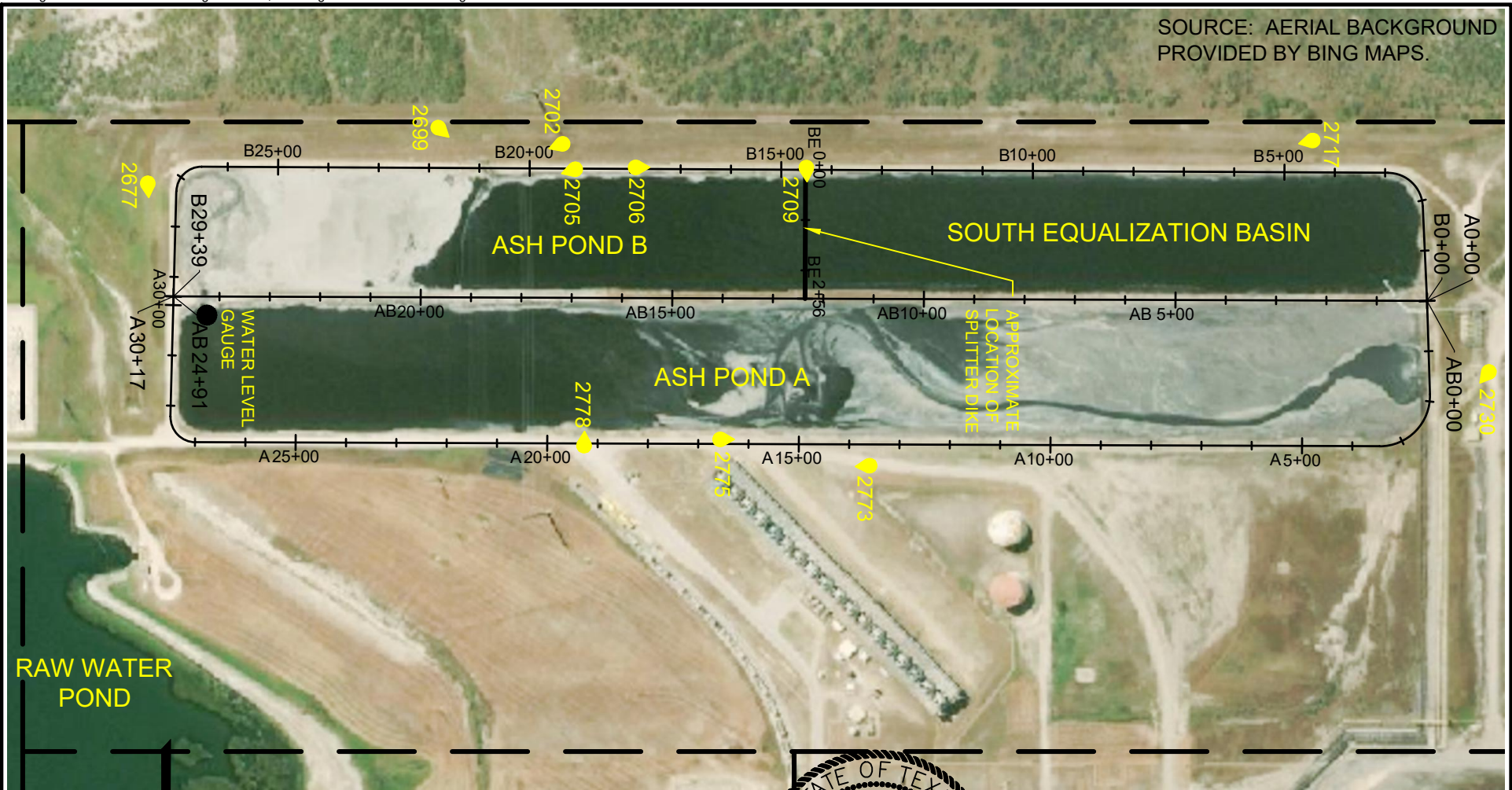
Figure 1

SITE MAP

PROJECT: 20379 | BY: RCAD-RR | DATE: JAN 2021 | CHECKED: DBB

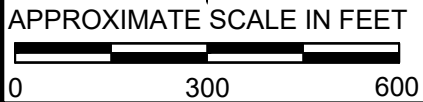
Bullock, Bennett & Associates, LLC
Engineering and Geoscience
Texas Registrations: Engineering F-8542, Geoscience 50127

SOURCE: AERIAL BACKGROUND
 PROVIDED BY BING MAPS.



EXPLANATION

- 
2778 PHOTO # AND DIRECTION OF PHOTO
- 
A10+00 POND STATIONING



Daniel B. Bullock
 1-8-2021

San Miguel Electric Cooperative Inc. Atascos County, Texas			
Figure 2			
Ash Ponds A and B, South EB Inspection Photos (DEC 2020)			
PROJECT: 20379	BY: RCAD-RR	DATE: JAN 2021	CHECKED: DBB
Bullock, Bennett & Associates, LLC Engineering and Geoscience Texas Registrations: Engineering F-8542, Geoscience 50127			

Date & Time: Tue, Dec 01, 2020, 10:56:58 CST
 Position: +028°41'57.45" / -098°28'16.18" (±15.8ft)
 Altitude: 299ft (±10.6ft)
 Datum: WGS-84
 Azimuth/Bearing: 356° N04W 6329mils True (±12°)
 Elevation Angle: +03.4°
 Horizon Angle: -05.5°
 Zoom: 0.5X



2677 - Facing North. A/B Ponds Exterior Slope.

Date & Time: Tue, Dec 01, 2020, 11:05:21 CST
 Position: +028°41'56.38" / -098°28'22.69" (±16.0ft)
 Altitude: 300ft (±10.3ft)
 Datum: WGS-84
 Azimuth/Bearing: 312° N48W 5547mils True (±12°)
 Elevation Angle: +07.3°
 Horizon Angle: +01.1°
 Zoom: 1.0X



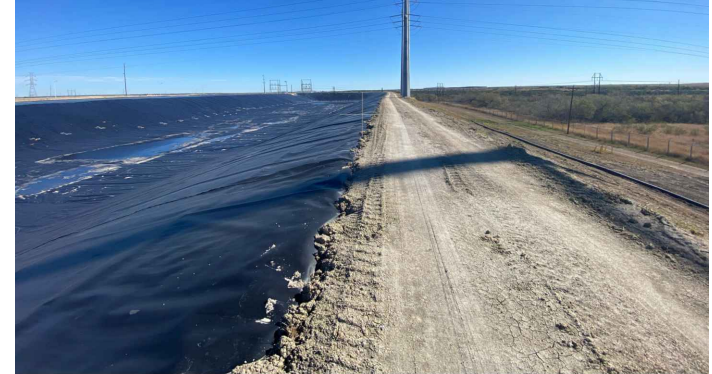
2699 - Facing Northwest. Ash Pond B, Exterior Slope.

Date & Time: Tue, Dec 01, 2020, 11:06:32 CST
 Position: +028°41'56.70" / -098°28'25.44" (±16.4ft)
 Altitude: 309ft (±9.7ft)
 Datum: WGS-84
 Azimuth/Bearing: 070° N70E 1244mils True (±12°)
 Elevation Angle: +06.2°
 Horizon Angle: -02.2°
 Zoom: 1.0X



2702 - Facing East. Ash Pond B, Exterior Slope.

Date & Time: Tue, Dec 01, 2020, 11:07:14 CST
 Position: +028°41'57.21" / -098°28'25.74" (±16.1ft)
 Altitude: 317ft (±10.3ft)
 Datum: WGS-84
 Azimuth/Bearing: 072° N72E 1280mils True (±12°)
 Elevation Angle: +02.3°
 Horizon Angle: -01.4°
 Zoom: 0.5X



2705 - Facing East. Ash Pond B, Interior Slope and Dike Crest.

Date & Time: Tue, Dec 01, 2020, 11:08:21 CST
 Position: +028°41'57.18" / -098°28'27.08" (±15.9ft)
 Altitude: 316ft (±10.6ft)
 Datum: WGS-84
 Azimuth/Bearing: 270° N90W 4800mils True (±12°)
 Elevation Angle: -06.6°
 Horizon Angle: -00.3°
 Zoom: 0.5X



2706 - Facing West. Ash Pond B Exterior Slope and Dike Crest.

Date & Time: Tue, Dec 01, 2020, 11:12:29 CST
 Position: +028°41'57.20" / -098°28'30.90" (±22.0ft)
 Altitude: 309ft (±19.6ft)
 Datum: WGS-84
 Azimuth/Bearing: 357° N03W 6347mils True (±12°)
 Elevation Angle: -00.2°
 Horizon Angle: -01.2°
 Zoom: 0.5X



2709 - Facing North. Ash Pond B and South Equalization Basin Splitter Dike.

Date & Time: Tue, Dec 01, 2020, 11:17:30 CST
 Position: +028°41'56.71" / -098°28'42.19" (±15.9ft)
 Altitude: 306ft (±10.5ft)
 Datum: WGS-84
 Azimuth/Bearing: 077° N77E 1369mils True (±12°)
 Elevation Angle: +02.7°
 Horizon Angle: -05.9°
 Zoom: 0.5X



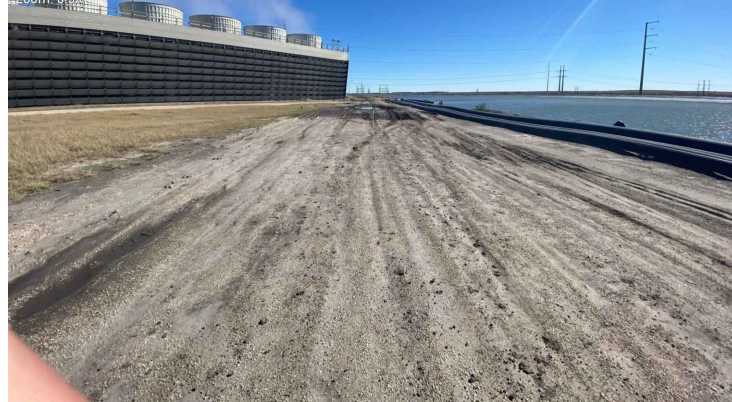
2717 - Facing East. South Equalization Basin Exterior Slope.

Date & Time: Tue, Dec 01, 2020, 11:27:56 CST
 Position: +028°42'1.28" / -098°28'46.09" (±15.6ft)
 Altitude: 311ft (±10.7ft)
 Datum: WGS-84
 Azimuth/Bearing: 039° N39E 0693mils True (±13°)
 Elevation Angle: +05.5°
 Horizon Angle: -00.5°
 Zoom: 0.5X



2730 - Facing Northeast. Ash Pond A, West Exterior Slope

Date & Time: Tue, Dec 01, 2020, 11:48:54 CST
 Position: +028°42'3.07" / -098°28'32.27" (±15.8ft)
 Altitude: 317ft (±10.7ft)
 Datum: WGS-84
 Azimuth/Bearing: 086° N86E 1529mils True (±13°)
 Elevation Angle: -00.3°
 Horizon Angle: -01.0°
 Zoom: 0.5X



2773 - Facing East. Ash Pond A Dike Crest.

Date & Time: Tue, Dec 01, 2020, 11:50:25 CST
 Position: +028°42'2.54" / -098°28'28.95" (±15.8ft)
 Altitude: 313ft (±10.6ft)
 Datum: WGS-84
 Azimuth/Bearing: 270° S90W 4800mils True (±12°)
 Elevation Angle: +06.4°
 Horizon Angle: -00.2°
 Zoom: 0.5X



2775 - Facing West. Ash Pond A Dike Crest and Interior Slope.

Date & Time: Tue, Dec 01, 2020, 11:51:50 CST
 Position: +028°42'2.65" / -098°28'25.90" (±16.0ft)
 Altitude: 316ft (±10.5ft)
 Datum: WGS-84
 Azimuth/Bearing: 182° S02W 3236mils True (±12°)
 Elevation Angle: +03.9°
 Horizon Angle: +00.4°
 Zoom: 2.0X



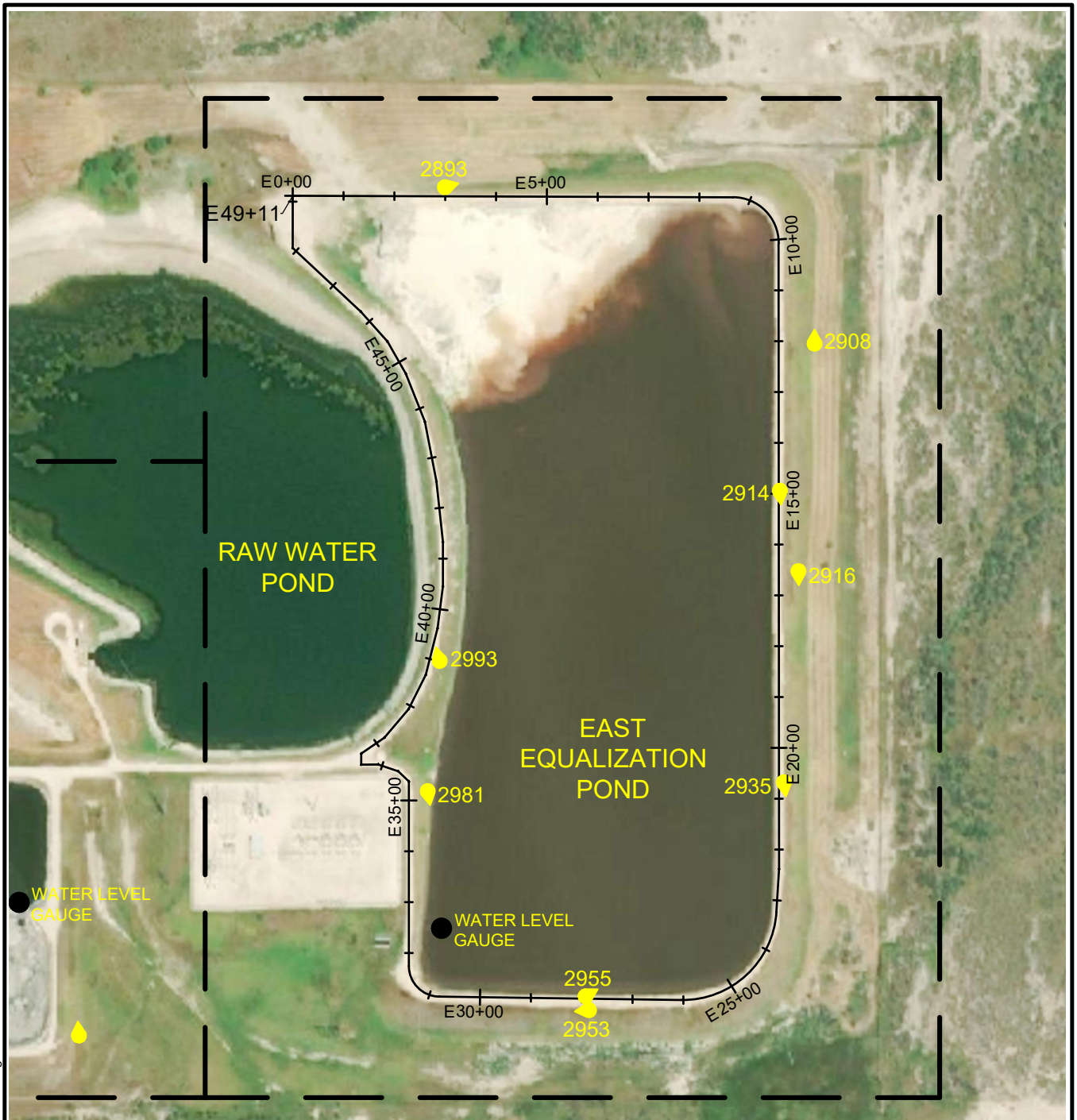
2778 - Facing South. Ash Pond A and Signage.



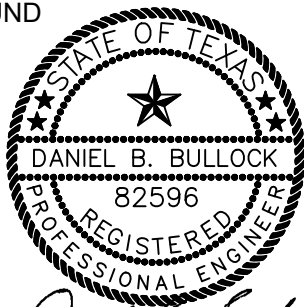
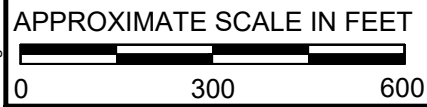
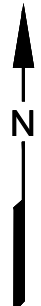
Daniel B. Bullock
 1-8-2021

San Miguel Electric Cooperative Inc. Atascos County, Texas			
Figure 3			
Ash Ponds A and B, South EB Inspection Photos (Dec 2020)			
PROJECT: 20379	BY: RCAD-RR	DATE: JAN 2021	CHECKED: DBB
Bullock, Bennett & Associates, LLC Engineering and Geoscience Texas Registrations: Engineering F-8542, Geoscience 50127			

Plot Date: 01/08/21 - 9:41am, Plotted by: Admin
 Drawing Path: K:\clients\bbba\San Miguel\20379, Drawing Name: G-GN-SD101.dwg



SOURCE: AERIAL BACKGROUND
 PROVIDED BY BING MAPS.



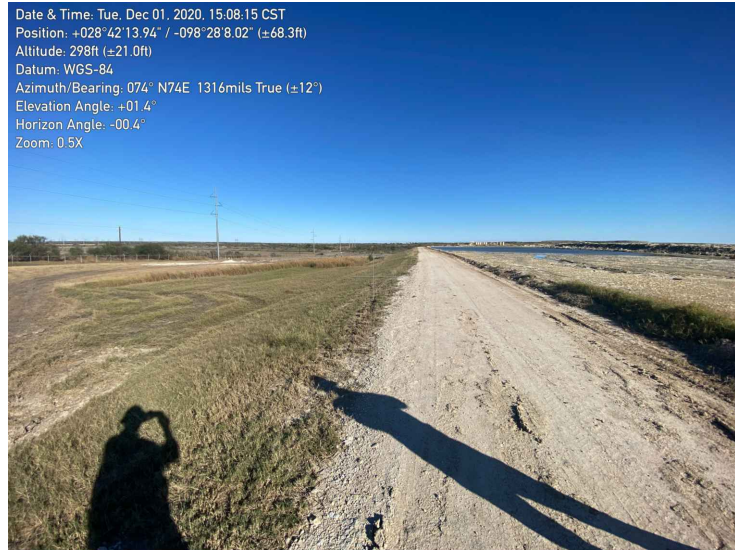
Daniel B. Bullock
 1-8-2021

EXPLANATION

- 2893 PHOTO # AND DIRECTION OF PHOTO
- E10+00 POND STATIONING

San Miguel Electric Cooperative Inc. Atascos County, Texas			
Figure 4			
East EP Inspection Photos (DEC 2020)			
PROJECT: 20379	BY: RCAD-RR	DATE: JAN 2021	CHECKED: DBB
Bullock, Bennett & Associates, LLC Engineering and Geoscience Texas Registrations: Engineering F-8542, Geoscience 50127			

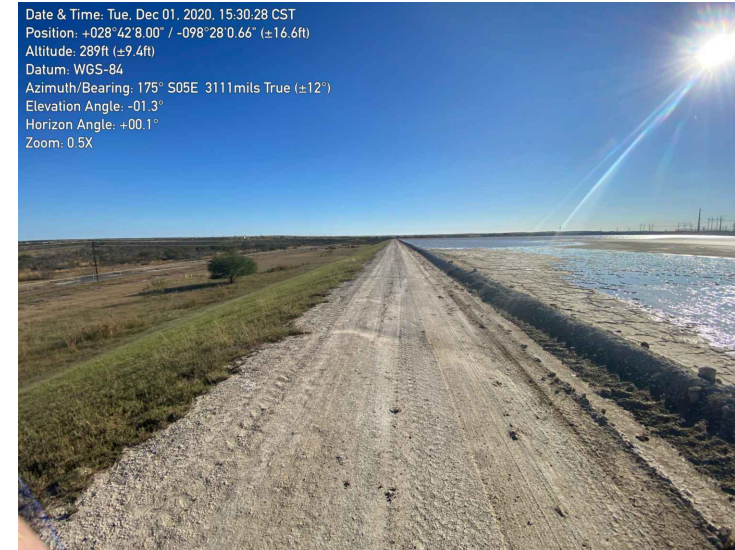
Plot Date: 01/08/21 - 9:41am, Plotted by: Admin
 Drawing Path: K:\clients\lbbat\San Miguel\20379, Drawing Name: C-ST-PL-101.dwg



2893 - Facing East. Northwest Corner, Exterior Slope and Dike Crest.



2908 - Facing North. East Exterior Slope, Interceptor Trench Construction in Background - Right Side.



2914 - Facing South. East Dike Crest.



2916 - Facing South. Southeast Exterior Slope.



2935 - Facing South. Southeast Dike Crest.



2953 - Facing West. South Dike Crest and Exterior Slope.



2955 - Facing East. South Dike Crest and Interior.

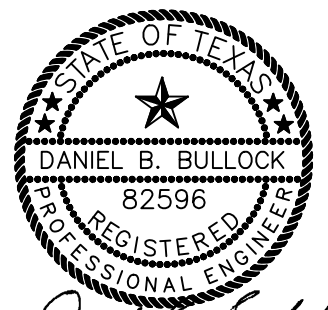


2981 - Facing South. Southwest Interior Slope.



2993 - Facing North. West Dike Crest, Raw Water Pond on Left.

Plot Date: 01/08/21 - 9:41am, Plotted by: Admin
 Drawing Path: K:\clients\bbba\San Miguel\20379, Drawing Name: G-GN-SD101.dwg



Daniel B. Bullock
 1-8-2021

San Miguel Electric Cooperative Inc.
 Atascosas County, Texas

Figure 5

East EP Inspection Photos
 (Dec 2020)

PROJECT: 20379 | BY: RCAD-RR | DATE: JAN 2021 | CHECKED: DBB

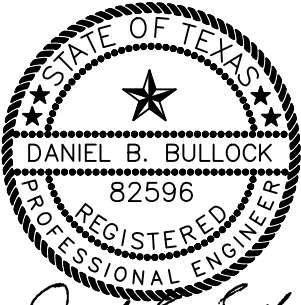
Bullock, Bennett & Associates, LLC
 Engineering and Geoscience
 Texas Registrations: Engineering F-8542, Geoscience 50127



SOURCE: AERIAL BACKGROUND PROVIDED BY BING MAPS.

EXPLANATION

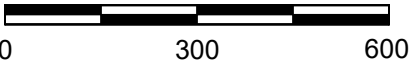
2883 PHOTO # AND DIRECTION OF PHOTO



Daniel B. Bullock
1-8-2021



APPROXIMATE SCALE IN FEET



San Miguel Electric Cooperative Inc.
Atascos County, Texas

Figure 6

Ash Pile Inspection Photos
(DEC 2020)

PROJECT: 20379 | BY: RCAD-RR | DATE: JAN 2021 | CHECKED: DBB

Bullock, Bennett & Associates, LLC
Engineering and Geoscience
Texas Registrations: Engineering F-8542, Geoscience 50127

Plot Date: 01/08/21 - 9:42am, Plotted by: Admin
Drawing Path: K:\clients\lbbat\San Miguel\20379\, Drawing Name: C-ST-PL-101.dwg



2866 - Facing Southwest. Ash Pile.



2869 - Facing South. Ash Pile and Wall.



2883 - Facing Northeast. Ash Pile and Wall.



2889 - Facing Northeast. Ash Pile and Wall.

Plot Date: 01/08/21 - 9:42am, Plotted by: Admin
Drawing Path: K:\clients\bbba\San Miguel\20379, Drawing Name: G-GN-SD101.dwg



Daniel B. Bullock
1-8-2021

San Miguel Electric Cooperative Inc.
Atascos County, Texas

Figure 7

Ash Pile Inspection Photos
(DEC 2020)

PROJECT: 20379 BY: RCAD-RR DATE: JAN 2021 CHECKED: DBB

Bullock, Bennett & Associates, LLC

Engineering and Geoscience

Texas Registrations: Engineering F-8542, Geoscience 50127