



Environment

Submitted to:
Platte River Power Authority
Ft. Collins, CO


Submitted by:
AECOM
Ft. Collins, CO
60775025
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Platte River Power Authority Rawhide Station

Annual Ash Monofill Inspection Report – 2025

Inspection Certified by:

I certify that this report has been prepared in accordance with 40 Code of Federal Regulations (CFR) 257.84(b)(2) requiring a written Annual Inspection Report prepared by a Qualified Professional Engineer (QPE) as set forth in the *Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments* for the Platte River Power Authority (Platte River) Rawhide Station landfill for 2025.


Patrick Clem, PE
Environmental Engineer
Colorado PE 0047622
Expires 10/31/2027



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Acronyms

%	percent
1997 ER&OP	1997 Revised Design and Operation Plan Addendum
2007 ER&OP	2007 Revised Design and Operation Plan Addendum
AECOM	AECOM Technical Services, Inc.
amsl	above mean sea level
BAT	bottom ash transfer
CCR	Coal Combustion Residual
CDPHE	Colorado Department of Public Health and Environment
CFR	Code of Federal Regulations
cy	cubic yards
EDOP	Engineering Design and Operations Plan
ER&OP	Engineering Report and Operational Plan
H:V	horizontal:vertical
Platte River	Platte River Power Authority
Rawhide	Rawhide Energy Station Unit 1
RCRA	Resource Conservation and Recovery Act
RSW	residual solid waste
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey

1.0 Introduction

1.1 Objective

Per the Coal Combustion Residual (CCR) Rule published by the United States Environmental Protection Agency (USEPA) and published in the Federal Register on April 17, 2015 (40 Code of Federal Regulations [CFR] 257.84(b)), existing and new CCR landfills (including any lateral expansion of a CCR landfill) are required to be inspected annually by a qualified professional engineer to establish that the CCR unit is in good condition and that the design, construction, operation, and maintenance conform to standard engineering practices for this type of facility. The inspection includes review of documentation and weekly reports indicating the condition of the facility and a visual inspection of the CCR unit.

The objective of this report prepared by AECOM Technical Services, Inc. (AECOM), on behalf of Platte River Power Authority (Platte River) is to present the results of the annual inspection of the CCR landfill at the Rawhide Energy Station Unit 1 (Rawhide), conducted in December 2025 per the CCR Rule established by the USEPA.

1.2 Outline of Rule Requirements

In accordance with the USEPA Final CCR Rule, Platte River is required to complete an annual inspection “to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards.” The minimum requirements, as per §257.84(b) of the USEPA Final CCR Rule, include the following:

- Review of available status and condition information including operational records and previous inspections;
- Visual inspection for signs of distress or malfunction; and
- Preparation of the landfill inspection report.

The inspection conducted in December 2025 is described within Section 3 of this report. Annual inspections have been performed by AECOM since 2016 to address the items listed below, pursuant to §257.84(b)(2) of the USEPA Final CCR Rule:

- (i) Changes in geometry of the structure since the previous annual inspection;
- (ii) Calculation of approximate volume of CCR contained in the unit at the time of the inspection;
- (iii) 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
- (iv) Other change(s) which may have affected the stability or operation of the CCR unit since the previous annual inspection.

1.3 Facility Description

The CCR landfill (ash monofill or monofill) at Rawhide is a residual solid waste (RSW) landfill located in Larimer County, Colorado. The solid waste disposal site at Rawhide is located near the northwest corner of the property as shown on **Figure 1-1**. In March 1981, Platte River obtained a Certificate of Designation for the Northeast ¼ of Section 6 Township 10 North Range 68 West, and the Southern ½ of Section 31 Township 11 North Range 68 West.

Overall, Rawhide encompasses approximately 4,560 acres. In addition to the plant buildings, the major feature of the facility is 500-acre Hamilton Reservoir which contains approximately 13,600 acre-feet of water. The power block area contains the boiler and turbine buildings, air quality control equipment, and administrative offices. A rail spur along the northern edge of the site connects Rawhide with Burlington Northern Santa Fe Railway mainline and is used to deliver coal and construction materials for plant operations.

Six thermal generating units are located at Rawhide. Units A, B, C, D, and F are fueled by natural gas, and Unit 1 is fueled by coal which produces the CCR solid waste contained in the monofill. The coal used in Rawhide Unit 1 operation comes from the Powder River Basin in Wyoming.

CCR waste from Unit 1 operations is disposed in the ash monofill comprised of two cells, described in this report as Cell 1 and Cell 2. Cell 2 is further broken down into Cell 2A which is unlined and Cell 2B which has a liner system. **Figure 1-2** shows the location and general area of the ash monofill. Cell 1 was filled from the south to the north between 1984 and 2007 and operated under the procedures and methods outlined within the following two documents:

1. Engineering Report and Operational Plan (ER&OP) for the Solid Waste Disposal Facility (PRPA, 1980) hereinafter referred to as the 1980 ER&OP.
2. Addendum to Engineering Report and Operational Plan (ER&OP) for the Solid Waste Disposal Facility (Rawhide, 1997) hereinafter referred to as the 1997 ER&OP Addendum.

Cell 1 is capped and no longer in use but has not undergone official closure under the Colorado Department of Public Health and Environment (CDPHE), Hazardous Materials and Waste Management Division, Colorado Code of Regulations (also CCR) 1007-2, Part 1 Section 3.5. On January 25, 2008, the CDPHE Hazardous Materials and Waste Management Division approved a request to modify the 1980 ER&OP (CDPHE, 2008). The modification allowed the facility to expand the current footprint of waste management for the monofill immediately to the west and adjoining Cell 1, into the area of current CCR disposal operations designated as Cell 2. A copy of the approval is included as **Attachment 2**. Similar to Cell 1, CCR waste placement in Cell 2 started behind a containment dike and is progressively moving north. Cell 2 is operated in accordance with the same two documents as Cell 1, in addition to a Revised Design and Operations Plan for the Solid Waste Disposal Facility (Smith Geotechnical, 2007) hereinafter referred to as the 2007 ER&OP Addendum.

A new Engineering Design and Operations Plan (EDOP) – Revision 4 (AECOM, 2021a) for Cell 2 was approved by CDPHE on December 21, 2021. This new EDOP provided the basis for the construction and operation of a new engineered cell referred to as Cell 2B. Cell 2B was constructed in 2022 and 2023 and includes a bottom liner and a leachate collection system. The portion of Cell 2 that was in operation prior to the 2023 construction of Cell 2B will be referred to as Cell 2A going forward.

Rawhide is owned and operated by Platte River. Platte River may be contacted as follows:

Platte River Power Authority
2000 East Horsetooth Road
Fort Collins, CO 80525
Attn: Christopher Wood
970-266-7906

1.4 Solid Waste Stream

According to the 1980 ER&OP, more than 99 percent (%) of the solid wastes generated at Rawhide are a result of the combustion of coal and the cleaning of the flue gas produced by the combustion. The removal of sulfur dioxide and fly ash is required to comply with USEPA and CDPHE emission standards. Approximately 80% of the solid waste produced at Rawhide comes from the operation of the air quality control system. Bottom ash accounts for approximately 20% of the solid waste. The bottom ash produced in the combustion process is collected in the bottom of the boiler. As of November 2018, a submerged grind conveyor system has been used to handle bottom ash, which is hauled directly to the ash monofill. Previously the bottom ash was hydraulically sluiced to the bottom ash transfer (BAT) impoundments. The BAT impoundments were closed in Summer-Fall 2020. As part of the closure, the remaining bottom ash in the BAT impoundments was transferred directly to the ash monofill. The remaining 0.1% of the solid wastes placed in the monofill is comprised of phosphorous sludges and inorganic construction materials. In 2019, the Stormwater Pond just north of the BAT impoundments was cleaned out for the first time since its construction. It is estimated that approximately 625 cubic yards (cy) of coal fines sediment was cleaned out and deposited in the monofill. With this recent cleaning, it can be estimated that approximately 600 to 700 cy of coal fines are generated by the adjoining coal unloading operations every 35 years.

The quantities of each segment of the waste stream, taken from the 1980 ER&OP, are estimated in **Table 1-1** below. Figure 3 in **Attachment 3** (appended from the 1980 ER&OP) provides an illustration of the solid waste stream and waste management.

Table 1-1. Estimated Solid Waste Quantities⁽¹⁾

	Average Daily		Maximum Daily		Average Annual		Average Plant Life		
	Ton	Acre-feet	Ton	Acre-feet	Ton	Acre-feet	Ton	Acre-feet	
Flue Gas Combustion Waste	175	0.11	262	0.16	64,000	39.2	2,240,000	1,370	82%
Bottom Ash	38	0.02	58	0.04	14,000	8.6	490,000	300	18%
Phosphorous Solids	-	-	-	-	-	0.23	2	8	<1%
Construction Materials	-	-	-	-	-	-	10,000	4	<1%
Total	213	0.13	320	0.02	78,000	48.08	2,299,002	1,682	100%

Note:

⁽¹⁾ 1980 ED&OP, Table 1 "Estimated Solid Waste Quantities"

- Approximately 82% flue gas residuals (75% fly ash, 4.7% unreacted slaked lime, 2.3% unslaked lime, and 0.8% inert matter);
- 17.9% bottom ash (mostly sand- and gravel-sized ash from the combustion process); and

- 0.1% phosphorus sludge (from tertiary treatment of the plant cooling water, plus inert construction waste).

The 2007 ER&OP Addendum indicated that the CCR waste stream was to be comprised of products of coal combustion, flue gas cleaning wastes, phosphorous sludge, and construction wastes from the continued development and construction of Rawhide (Smith Geotechnical, 2007). The monofill expansion (Cell 2) was to continue to be used for the disposal of approved waste products from current operations.

According to CDPHE, the ash monofill is a non-hazardous solid waste landfill under Subtitle D of the RCRA. The wastes deposited in Cells 1 and 2 are not combustible; therefore, there are no plans for providing fire hydrants or other fire control measures in the disposal area. Also, the wastes are odorless and do not create rodent or insect issues since the wastes have no caloric value.

1.5 Facility Design and Components

1.5.1 Siting

This section describes the siting considerations with respect to the geology and hydrogeology at the Unit 1 plant and at the monofill.

Geology

The geologic setting at Rawhide lies on the high plains immediately east of the Colorado Front Range, where soil and bedrock units are incised by drainage from nearby mountains to the West, forming small, relatively minor valley and ridge topographic expressions. Elevations within the project area range from about 5,580 to 5,805 feet above mean sea level (amsl). The most distinctive topographic feature at Rawhide is a broad basin that occupies the center of the site and extends from northwest to southeast. Smooth ridges and rounded bluffs surround this basin and mark the transition to uplands that are 50 to 70 feet higher. It is within this basin that the site for the Rawhide monofill disposal area was selected. Hamilton Reservoir occupies the lower portion of this valley to the south.

According to the United States Geological Survey (USGS) geologic map, bedrock at Rawhide consists of Cretaceous units including the Upper Pierre Shale Formation. Specifically, the majority of the Rawhide site lies on the Upper Pierre Shale Formation transition zone, the eastern extent of which transitions to the Lower Fox Hills Sandstone downslope and east of the Rawhide site. The Pierre Shale transition zone is described as shale with interbedded sandstones. The portions 600 feet below the contact with the Fox Hills sandstone are mapped by the USGS as being the most permeable within the unit, yielding 5 to 15 gallons per minute in wells (Hershey and Schneider, 1972). The Fox Hills Sandstone is described as a pale yellow, massive, silty, fine-grained sandstone with lenticular black shale partings, but is not present at the surface on the Rawhide site.

The bedrock at the site is mapped as dipping east-southeast toward Hamilton Reservoir. The geologic map indicates bedrock bedding in the area striking roughly north to south with shallow dips of 5 to 10 degrees to the east. Several faults are recorded in the area surrounding Rawhide: the Rawhide Fault approximately 5 miles to the north, the Round Butte Fault approximately 4 miles northwest, and an unnamed fault about 1 mile north of the site. None of these faults are considered potentially active or have been associated with recent seismic events. According to the Uniform Building Code Seismic Zone Map, the Rawhide site is in Zone 1, an area of overall minor seismicity.

Overburden soils at the site are mapped as Pleistocene pediment deposits consisting of arkosic sands and gravel with minor amounts of red clay. More recently, relatively thin soils mantling the pediment deposits and bedrock in the area are likely wind-blown silts and clays.

The original geotechnical investigation for Rawhide was conducted by Black and Veatch Consulting Engineers in 1978-1979 (Black and Veatch Consulting Engineers [Black and Veatch], 1979). During the investigation three borings were drilled within or near the area of the monofill (B-94, B-95, and B-96). Boring B-95 encountered sands with varying silt and clay content in the upper 10 feet and claystone bedrock (very weathered shale) below. Borings B-94 and B-96 were completed to the west and east of the proposed monofill, respectively. At those locations, sands with varying silt and clay content were observed to depths of 23 and 50 feet and were underlain by weathered shale bedrock.

An additional investigation was performed by Smith Geotechnical in 2007, to classify soils and provide engineering recommendations for the footprint area of Cell 2. The investigation consisted of drilling and sampling seven borings. Subsurface information collected in the Smith Geotechnical report summarizes the soil and bedrock as follows: A layer of clay was encountered in all borings from the ground surface to a maximum depth of 8 feet below grade. The clay was tan, moist, stiff to very stiff, and plastic. Claystone was encountered in all borings under the overburden clay at depths ranging from 3 to approximately 20 feet below grade. The claystone was generally tan, moist, soft, and completely to severely weathered.

Relevant soil borings in the area of the monofill from the 1980 ER&OP and 2007 ER&OP Addendum documents are included in **Attachments 1 and 3**. Figure 1 in **Attachment 3** indicates areas where the borings were advanced in the monofill from both of these earlier investigations. Two new monitoring wells were installed along the southern boundary of the monofill during an investigation conducted in January and February 2016. Those wells were installed as part of a broad investigation performed to further the understanding of shallow groundwater characteristics at the monofill and at the location of the BAT impoundments. Two new groundwater monitoring wells were installed at the ash monofill in December 2018. Monitoring well ASH-06 was installed upgradient of the ash monofill to provide additional background data while monitoring well ASH-07 was installed downgradient of the ash monofill to further characterize the extent of Statistically Significant Increases. One additional groundwater monitoring well was installed at the ash monofill on April 24, 2019. Monitoring well ASH-08 was installed downgradient of the ash monofill to further characterize the extent of constituents in this area. Since 2019, three additional wells have installed downgradient of the ash monofill. ASH-09, installed in 2023, acts as a characterization well and ASH-10 and ASH-11, installed in 2025, act as point of compliance wells at the 150-meter downgradient for CDPHE and act as nature and extent characterization wells for the Federal Rule.

Hydrogeology

The hydrogeology at Rawhide is discussed in the 1980 ER&OP and in the "Final Report Investigation of the Groundwater Monitoring Program for the Bottom Ash Disposal Site" (Lidstone and Anderson, Inc., 1989). According to the 1980 ER&OP, the hydrogeology of the Rawhide site was originally investigated by drilling and installing 21 monitoring wells. Data from the wells indicated that a groundwater table exists within the Pierre Shale bedrock below the site and in surficial deposits along Coal Creek. The report explained depth to groundwater varied across the Rawhide site from 11 to 67 feet and follows a general gradient to the south-southeast. The shallow water table, as explained in the 1980 ER&OP, was determined to be recharged by infiltration from precipitation and surface runoff.

Groundwater was not encountered in any of the borings drilled in the Cell 2 footprint by Smith Geotechnical in 2007.

Lidstone and Anderson (1989) concluded that sufficient data was collected on the groundwater beneath the Rawhide site to determine a mound has formed in the shallow fractured Pierre Shale Aquifer in the vicinity of Hamilton Reservoir. After a review of available documents on the current water levels within the area, AECOM concluded that the monofill is hydraulically upgradient of any groundwater mound that may be created by Hamilton Reservoir, and groundwater mounding associated with Hamilton Reservoir would not affect the overall performance of the monofill disposal site.

1.5.2 Subgrade, Liner, and Leachate Collection

Six piezometers were installed in December 2018 per CDPHE's guidance in order to gain a better understanding of the depth to groundwater below the existing ground surface of the future Cell 2B footprint. The development of Cell 2B was designed with a minimum vertical separation distance of 5 feet from the uppermost water bearing zone to be in compliance with CCR regulations as detailed in 40 CFR 257.102. The depth to the uppermost water bearing zone within the footprint of the Cell 2B, as measured from December 2018 to November 2019, varied from approximately 4 to 37 feet below ground surface. PZ-1 was abandoned in October 2020 due to advancement of the active face of Cell 2. Piezometers PZ-2 and PZ-6 were abandoned in July 2022 due to planned construction activities associated with engineered liner system for Cell 2B. Piezometers PZ-3 through PZ-5 remain in place for future monitoring. In 2025, the depth to the uppermost water bearing zone measured with the footprint of Cell 2B in piezometers PZ-2 through PZ-5 varied from approximately 20 to 34 feet below ground surface measured during the semi-annual groundwater monitoring events.

According to the 1980 ER&OP, Cell 1 of the monofill was constructed by removing and stockpiling the existing topsoil over one to two acres at a time (approximately one year's waste generation at that time) then placing the CCR wastes directly on the exposed subgrade. The 1980 ER&OP did not require construction of a separate compacted earthen liner or a geocomposite liner. The 1980 ER&OP did recommend that approximately 13 acres on the east side of Cell 1 receive an 18-inch-thick partial liner above an elevation of 5,740 feet to limit leachate movement southeastward along the dip of the bedrock. No evidence of the construction of this partial liner was identified in the documents reviewed by AECOM.

Per the 1980 ER&OP, based on the premises that "groundwater resources associated with the overall plant site are minor," the general dip of the shale bedrock toward the southeast; low permeability of the waste material; and high evapotranspiration and diversion of limited precipitation around the monofill, "leachate from the landfill will be insignificant." The 1980 ER&OP continues to explain, "Precipitation that falls on temporarily uncovered wastes in active fill areas will run off and be collected behind the temporary earth dike and held for evaporation." Any leachate that did leave the monofill was thought to be captured by the downstream cooling water dam and reservoir which is constructed down to bedrock and designed to minimize seepage.

According to the 2007 ER&OP Addendum for Cell 2, that portion of the monofill is constructed similarly to Cell 1 by removing/stockpiling the existing topsoil over one to two acres at a time for use during reclamation activities. After clearing the topsoil, the active area is filled to approximately 21 feet above the existing grade with solid waste material. After filling and compacting the one to two-acre section, a two-foot-thick earthen cover will be placed over the waste material. The cover material will be moisture conditioned, compacted, and reseeded.

A March 12, 2010 letter from CDPHE approved the Construction Quality Assessment Report for Cell 2 and is included as **Attachment 4** (CDPHE, 2010).

Groundwater protection for Cell 2 was based on similar premises and remedial actions for Cell 1 and includes limiting leachate produced through the use of soil cover and diversion away from the monofill; low permeability of the waste material, high evapotranspiration rates; stormwater diversion; and groundwater protection provided by the down-gradient Hamilton Reservoir. Due to the combination of these safeguards, the 2007 ER&OP Addendum determined the leachate resulting from the Cell 2 monofill material will be insignificant. The existing portion of Cell 2 was constructed in accordance with the currently approved 1980 ER&OP and the 2007 ER&OP Addendum. Cell 2B was constructed in 2022 and 2023 in accordance with the procedures specified in the new EDOP– Revision 4 dated December 16, 2021 (AECOM, 2021a) and approved by CDPHE on December 21, 2021.

1.5.3 Material Placement and Final Slopes

The 1980 ER&OP indicated that CCR waste was to be placed typically 21 feet above grade, starting behind a compacted starter dike and moving northward. The ash was to be hauled and unloaded in a wetted condition to reduce fugitive dust, then placed in lifts and compacted. Figure 11 in **Attachment 3** shows the solid waste disposal fill sequence for Cell 1. Table 1-2 from the 1980 ER&OP provides the landfill volumetric and reclamation schedule for Cell 1.

Table 1-2. Cell 1 Landfill and Reclamation Schedule

Section Number	Section Area (acres)	Section Volume* (acre-feet)	Start of Fill Date (year)	Annual Filled & Reclaimed Area (acres)
1	9.8	200	1984**	2.3
2	18.7	425	1988	2.1
3	15.8	500	1997	1.5
4	17.6	545	2007	1.5
Totals	61.9	1,670	--	--

Notes:

*Volume capacity was based on mounding the material to an approximate height of 21 feet above level fill where required using 4:1 side slopes.

**Construction wastes were actually placed in this section beginning in 1980.

The 2007 ER&OP Addendum retained the general placement features of the 1980 plan. To avoid disrupting the views of neighbors, Section 4 of Cell 1 was not fully filled prior to beginning placement in Section 1A of Cell 2. Figure 2 in **Attachment 1** shows the solid waste disposal fill sequence for Cell 2. Table 1-3 from the 2007 ER&OP Addendum provides the landfill volumetric and reclamation schedule for Cell 2. The schedule for Cell 2 found in Table 1-3 of the 2007 ER&OP addendum is superseded by the schedule specified in the EDOP Revision 4 dated December 16, 2021 (AECOM, 2021a) and approved by CDPHE on December 21, 2021. The approximate total waste of the ash monofill, defined as the three-dimensional gross volume of the landfill available for waste disposal, is as follows based on estimate volumes provided in the 2021 EDOP revision 4(AECOM 2021a):

- Cell 1: 1,710,000 cy – already filled according to Platte River operational records.
- Cell 2A: 740,000 cy – already filled as of December 2018 according to Platte River operational records.
- Cell 2A: 257,600 cy – placed between December 2018 and July 2021, which includes 120,155 cy of material placed during BAT Impoundment Closure.
- Cell 2A: 56,820 cy – placed in 2022 prior to construction of Cell 2B.
- Cell 2B: 14,347 cy - placed in 2023 after construction completion.
- Cell 2B: 319,975 cy – remaining to be filled.
- Total Ash Monofill: 3,098,742 cy

These capacities represent the planned volume of waste.

An estimate of the average quantity of waste disposed in the Ash Monofill per year has been calculated from Platte River's operational records to be approximately 63,800 cy. However, it is anticipated that the annual waste disposal will decrease due to a higher volume of material going to beneficial reuse operations. The lifespan of Cell 2B is anticipated to be approximately 5 to 8 years based on approximately 60,000 to 40,000 cy of waste placed in Cell 2B per year.

The 2007 ER&OP Addendum lists the following equipment and their respective uses for solid material placement in Cell 2:

- **Dump Trucks** – These trucks will be used for transporting the solid waste to the disposal area.
- **Compactor Tractor and Blade** – This tractor will be used for moving and compacting waste after dumping.
- **Water Spray Truck** – This truck is for applying water to waste prior to compaction and wetting the haul roads to prevent fugitive dust emissions.
- **Scraper** – This will be used for removal of topsoil prior to waste disposal and for depositing topsoil during reclamation.
- **Medium Size Farm Tractor** – This tractor will be used to mix the ash and water prior to compaction. The tractor will also be used to seed and fertilize reclaimed areas.
- **Portable Irrigation Equipment** – This equipment is for use in establishing the vegetative cover after reclamation.

Revised ash disposal and equipment protocols are proposed in the new EDOP– Revision 4 (AECOM, 2021a) dated December 16, 2021, and approved by CDPHE on December 21, 2021.

Per Mr. Chris Wood (Platte River), the CCR disposed of at the Rawhide monofill is currently transported from the combustion area by loading off-road haul trucks that transport the CCR to the working area of the monofill. The plant combustion/generation system generally runs 24 hours a day, seven days a week. Disposal operations have been modified to daily disposal of fly ash and bottom ash (the BAT impoundments are no longer being used and were closed in Summer/Fall 2020). A revised summary of the volume of CCR contained in the monofill, prepared by Platte River from their records, is appended as **Attachment 5**. In 2025, fly ash generated from Unit 1 was primarily sold for beneficial reuse; therefore, significantly less fly ash was placed in the monofill than was anticipated.

1.5.4 Final Cover

For Cell 1, the 1980 ER&OP noted that after each section was filled, a 2-foot-thick earthen cover was to be placed, compacted, and seeded. Finished surface grades were reported to be four horizontal to one vertical (4H:1V) in the north-south direction. The 2007 ER&OP Addendum retained the final covering and grade features of the 1980 plan. Figure 12 (**Attachment 1**) and Figure 3 (**Attachment 1**) provide typical landfill north-south cross sections from the 1980 ER&OP and the 2007 ER&OP Addendum, respectively.

The cover over the existing Cell 2A was constructed in accordance with the currently approved 1980 ER&OP, the 1997 ER&OP Addendum, and the 2007 ER&OP Addendum. Cell 2B will be constructed in accordance with the procedures specified in new EDOP – Revision 4 dated December 16, 2021 (AECOM, 2021a) and approved by CDPHE on December 21, 2021.

1.5.5 Stormwater Management

The 1980 ER&OP suggested that precipitation runoff would be limited by excavation of a capture trench on the upgradient (north) side of the active face of Cell 1 to divert storm water around the landfill, with the main Hamilton Reservoir as the down-gradient destination. It is not known whether such a capture trench was constructed.

As noted within the 2007 ER&OP Addendum, to prevent damage from stormwater runoff, a diversion channel along the west toe of Cell 1 was constructed along the western edge of the monofill expansion

(AECOM observed that a wide stormwater swale exists on the west perimeter of Cell 2). According to the 2007 ER&OP Addendum, the west diversion channel was designed to pass the 100-year, 24-hour storm flows from the areas upstream of the monofill. The diversion channel is a permanent fixture of the monofill and will remain after the final closure.

A further discussion of stormwater management is provided within the Solid Waste Disposal Facility Run-on and Run-off Control System Plan (AECOM, 2021c), which was prepared to meet the requirements of 40 CFR 257.81.

2.0 Review of Existing Information

In accordance with the USEPA Final CCR Rule §257.84(b)(i), Patrick Clem (a qualified professional engineer with AECOM) completed “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).”

2.1 CCR Unit Documents and Operating Records

Below is a list of documents reviewed with respect to the ash monofill:

- Engineering Report and Operational Plan for the Solid Waste Disposal Facility, Rawhide Energy Project (PRPA, 1980)
- Addendum to Engineering Report and Operation Plan for the Solid Waste Disposal Facility (Rawhide, 1997)
- Revised Design and Operations Plan for the Solid Waste Disposal Facility, Rawhide Energy Station (Smith Geotechnical, 2007)
- Fugitive Dust Control, Compliance Monitoring, and Documentation for Fugitive Particulate Emission Sources (PRPA, 2017)
- Engineering Design and Operations Plan (EDOP) for Cell 2B of the Ash Monofill – Revision 4. Rawhide Energy Station, Platte River Power Authority, Fort Collins, Colorado, December 2021 (AECOM, 2021a)
- Platte River Power Authority – Rawhide Station Annual Ash Monofill Inspection Report – January 2024 (AECOM, 2024)
- Platte River Power Authority – Rawhide Station Annual Ash Monofill Inspection Report – January 2025 (AECOM, 2025)
- Platte River Power Authority – Rawhide Residual Solid Waste Ash Monofill Stability Evaluation (AECOM 2016a)
- Solid Waste Disposal Facility Run-on and Run-off Control System Plan, Platte River Power Authority (AECOM 2016c).
- Monofill Annual Volume Summary, 1998-2025 (Platte River file information (PRPA, 2025)

3.0 Annual Inspection Summary

The annual inspection was conducted by AECOM on Wednesday, December 10, 2025 starting at 9:00 a.m. Mountain Standard Time outside of the Rawhide administrative offices. The weather was sunny with wind and approximately 40 degrees Fahrenheit. No snow cover was present during the inspection visit.

AECOM personnel in attendance for the inspection included:

- Emily (Conkling) Yonker, PE (WY, CO, ND)
- Jeremy Hurshman, PG (WY, KS)

The completed federal CCR annual inspection form used during the inspection is included as **Attachment 6**. A sample weekly inspection form used by Platte River is included as **Attachment 7**. A photographic log for the December 2025 inspection is included as **Attachment 8**.

3.1 Strategy and Route

The general strategy and route of the inspection included a general walkover of Cell 1, continued onto Cell 2A and to the new Cell 2B. The walk across Cell 1 started at the south containment dike, proceeded north along the east slope, then west across the crest, then south along the west slope. The walk across Cell 2A started at the north, proceeded to the south containment dike, then proceeded north to the connection of the former active face of Cell 2A and the new Cell 2B. The overall inspection started and concluded at the south end of Cell 1.

The new Cell 2B connects to the former working face of Cell 2A approximately 1,000 feet north of the starter dike. The active face of Cell 2B was observed to have a bottom liner and leachate collection system installed with a protective cover on top of the liner. The newly constructed Cell 2B was observed during the inspection.

3.2 Facility Conditions

In general, the ash monofill at Cell 2B is well organized and maintained. Ash is being placed in the new Cell 2B by placing piles of ash in the center of the cell and pushing them laterally using tracked equipment. Access ramps into Cell 2B have been constructed using ash CCR material. It is noted that once the ash is spread in the cell and exposed to weather, part of the ash surface crusts over due to the cementitious properties of the fly ash. This serves to limit wind-blown ash.

No significant observations associated with the CCR regulation inspection requirements were noted. Some minor deficiencies were noted and are discussed below:

- The starter dike at Cell 1 and Cell 2 appeared to be in good condition with occasional small animal burrows (1 to 2-inch diameter) in the upper 8 to 12 inches of the ground surface in isolated areas. The cover slopes of Cell 1 and Cell 2 appear to be in good condition with occasional animal burrows in isolated areas (Photo 1 of **Attachment 8**).
- One large burrow (6- to 8-inch diameter) was observed on the east slope of Cell 1, approximately 150 feet west of the access road and approximately 150 feet south of monitoring well PRS-01 (Photo 34 of **Attachment 8**). A second large animal burrow (6-8 inches in diameter) was observed at the north end of Cell 1. A third larger animal burrow was observed on the west side of Cell 1, approximately half the distance between piezometers PZ-2 and PZ-3 and 100 feet up the slope of the cell (Photo 32 and 33 of **Attachment 8**).

- Additionally, small amounts of exposed ash were observed near the ditch and access road on the east side of Cell 1, approximately 1,000 feet north of the PRS Ponds (Photos 19 and 29 of **Attachment 8**).
- Access roads over the starter dikes and around the monofill perimeter are maintained with gravel surfacing and have storm water drainage swales, preventing direct runoff onto the face of the starter dike. One exception to the gravel access roads observed on Cell 1 and Cell 2A running towards the corner of Cell 2B. The access road does not contain gravel or protective cover and is present directly on top of placed ash (Photos 6-9 of **Attachment 8**).
- There are a few small areas with current erosion stemming from the sparse vegetation. Sparse vegetation was noted 800 feet north of PRS-02 midway up the east slope of Cell 1 (Photo 18 of **Attachment 8**). Additionally, thin vegetative cover was observed on the slopes directly above the new protective cover of Cell 2B across from the sump (Photo 4 of **Attachment 8**). Thin vegetation is also present along the north end of Cell 1 running in an east/west orientation and appears to be an old roadway (Photos 5, 22, 25 of **Attachment 8**). Sparse vegetation on the east face of the north end of Cell 1 forms minor erosional features between grass clumps (Photo 28 of **Attachment 8**).
- Rabbitbrush plants were observed at the north end of the cover to Cell 1 scattered within vegetative grasses (Photos 16, 21, 22, 24 of **Attachment 8**). Brush size averages 2-3 feet in diameter.
- Ash was observed to be pushed outside the extent of the protective cover along the western slope of Cell 1 (Photo 10 of **Attachment 8**) and northern slope of Cell 2B (Photo 11 of **Attachment 8**).
- Ash was observed outside the limit of the landfill on the northern edge (Photo 20 of **Attachment 8**).
- A small depression (1-2 feet in depth by approximately 10 foot in diameter) was observed on top of Cell 2A approximately 500 feet south of the northeast corner of the former active face (Photo 3 of **Attachment 8**).
- Stormwater culverts were inspected and considered to be in good working conditions (Photos 1 and 2 of **Attachment 8**). The outfall side of the stormwater culvert near monitoring well ASH-03 is half buried in sediment and could be cleaned out.

Per the 1980 ER&OP, "The moistened wastes hauled to the disposal area will be spread into layers 6 to 8 inches thick and then thoroughly wetted by a sprayer truck. Complete mixing of the solid waste and water will be accomplished by a soil mixer before it is rolled and compacted." AECOM was advised that the fly ash is thoroughly moistened at the point of collection before transport to the monofill, so lack of additional wetting at the point of placement is not considered to be significant. Although the method of compaction (dozing from a working face versus compaction in lifts per the 1980 ER&OP), the relatively gentle finished grades and results of an April 2016 stability analysis by AECOM (AECOM, 2016a) indicate that the alternate method of placement is acceptable (see Section 3.3 below).

3.3 Geometry of Monofill

As required by §257.84(b)(2)(i), no changes in finished geometry were noted from those reported in previous documentation reviewed by AECOM. The 1980 ER&OP and 2007 ER&OP Addendum indicate that the general finished slope configuration should be at 4H:1V. This appears to be the case in the north-south direction where the slopes vary from 10H:1V or flatter, up to 4H:1V. On the eastern side of Cell 1, the eastern slope was measured at approximately 3:1H:V in localized areas around a high-voltage transmission line pole. This is steeper than what was recommended in the 1980 ER&OP, although the slopes appeared to be performing well and showed no signs of distress.

The April 2016 slope stability analysis (AECOM, 2016a) was performed on the eastern side of Cell 1 and through the starter dike and finished portion of Cell 2. It was concluded that the slopes have adequate safety for the static case, although some minor slope maintenance might be required after a seismic event. The facility slopes and benches appeared well graded and maintained. AECOM observed that the finished cover of Cell 1 (and the completed portion of Cell 2A) are graded in a manner that discourages surface ponding and minimizes infiltration through the cover. A primary run-off swale is present along the west perimeter of Cell 2A and appears to discharge from the completed top surface of Cell 2A through a steel pipe near the southwest corner, extending under the access road and to the front of the containment dike, allowing surface water from the seeded cover of Cell 2A to move by overland flow downstream to Hamilton Reservoir.

3.4 Approximate Volume

According to information from Platte River, the total volume of CCR in the monofill as of December 31, 2024, was 2,781,855.8 cy. According to Platte River data, 18,834.6 tons of combined fly ash and bottom ash and other waste from lime, sulfate, and activated carbon usage from ongoing operations were deposited in the monofill from January 1 through December 31, 2025. At a density equivalent of 1.0125 tons/cy, it is estimated that the monofill will contain $2,781,855.8 + (18,834.6/1.0125)$ or 2,800,457.9 cy of CCR as of December 31, 2025 per CCR Regulation Section §257.84(b)(2)(ii) (see **Attachment 5** for details). Beginning in 2006, fly ash sales were incorporated into the CCR calculations of waste placed into the CCR monofill. Beginning in 2019, lime, sulfate, and activated carbon usage were included into the CCR monofill waste calculations due to operational changes and upgrades. In 2021, residual solids from the wastewater treatment tank and solids from the plant floor drains were placed in the monofill and will continue to be placed in the monofill every two years. In 2021, these volumes were estimated to be approximately 8,400 cy and is included in the waste volume of the monofill. Wastewater treatment tank residuals have not been placed in the monofill since 2021 as shown in **Attachment 5**.

3.5 Structural Inspection

There was no observed structural weakness of the CCR monofill unit, nor any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit, per CCR Regulation Section §257.84(b)(2)(iii).

3.6 Additional Changes

The ash monofill and appurtenant structures (culverts and power poles) did not show any signs of major distress or malfunction, per CCR Regulation §257.84(b)(1)(ii). AECOM did not observe any other changes which may affect the stability or operation of the monofill per CCR Regulation §257.84(b)(2)(iv).

4.0 Conclusions and Recommendations

As noted in the CCR Rule §257.84(b)(5), “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.”

Deficiencies or releases identified during the inspection and items identified during the document review regarded as “potential” deficiencies are discussed in Section 4.2 below.

As mentioned previously, the future progress of Ash placement in Cell 2B will be completed in accordance with the procedures specified in the EDOP Revision 4 dated December 16, 2021 (AECOM, 2021a) and approved by CDPHE on December 21, 2021.

4.1 Recommendations Other Than Normal Maintenance

Recommendations other than normal regular maintenance items were noted, including:

- Three larger animal burrows (6- to 8-inch diameter) were observed on the east slope, west slope, and north slope of Cell 1. There does not appear to be an increase in larger burrows from the previous inspection. However, it is recommended that this be monitored and if the numbers of burrows increase, removal steps may be required.
- The number of small burrow areas observed on Cell 1 does appear consistent with previous inspections. Attempts at burrowing by small rodents observed in the protective cover of Cell 2B and the areas should be monitored. Animals appear to abandon burrows once the geosynthetic liner is reached. There does not appear to be erosional concerns surrounding the burrows at this time, but areas should continue to be monitored.
- Remove Rabbitbrush from the north end of Cell 1.
- Perform periodic cleanout of the two culverts just south of Cells 1 and Cell 2A.
- Remove ash debris observed in the road berm located on the north end of Cell 1 and place in Cell 2B.
- Place ash extending outside the protective cover of Cell 2B back into Cell 2B on the north and west slopes of the cell.
- Place cover material over the ash exposed in the roadway entering the corner of Cell 2B and connect to Cell 1 or remove road from use and place final cover.

4.2 Deficiencies Discovered

No significant deficiencies were noted as part of this annual inspection or document review.

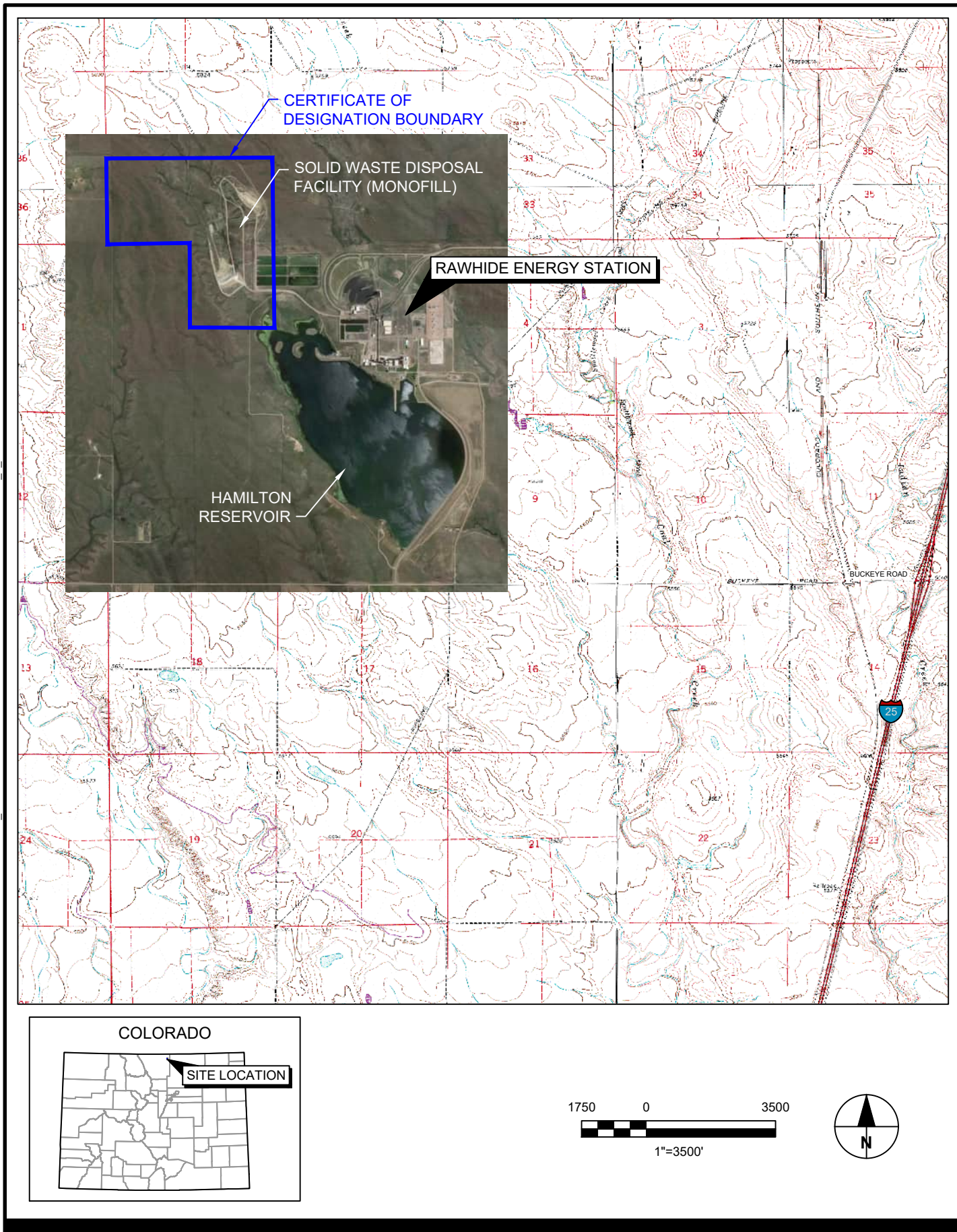
4.3 Corrective Measures Taken

Platte River is working to reduce small animal burrows across the landfill cover by working with a rodent removal specialist. Areas of sparse vegetation on Cell 2A have been reseeded in 2025. No other corrective measures for significant deficiencies were noted that need to be taken by Platte River as part of this annual inspection.

5.0 References

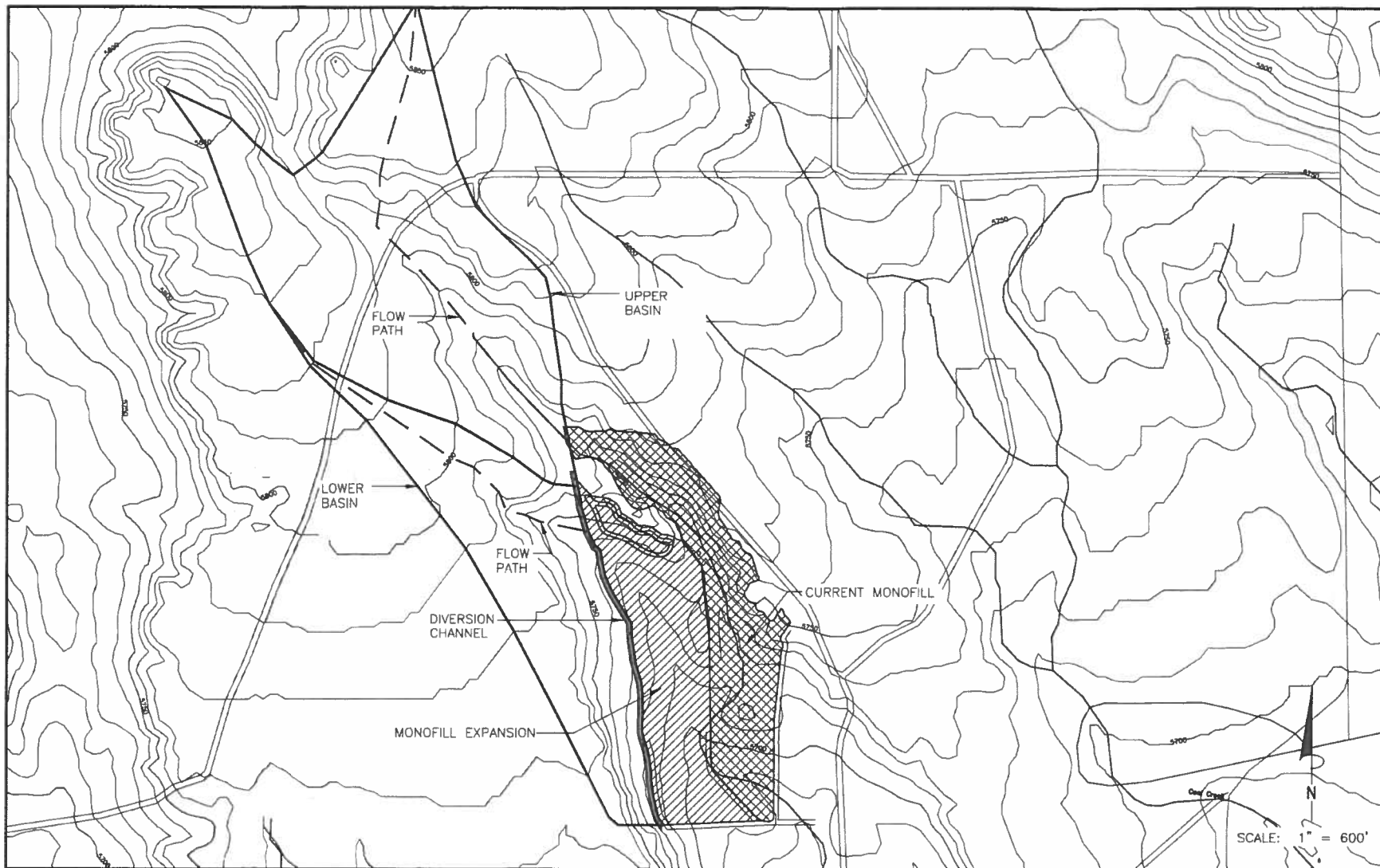
- AECOM Technical Services, Inc. (AECOM). 2016a. Platte River Power Authority – Rawhide Residual Solid Waste Ash Monofill Stability Evaluation. April.
- AECOM. 2016b. Solid Waste Disposal Facility Run-on and Run-off Control System Plan, Platte River Power Authority, AECOM, October 12, 2016.
- AECOM. 2021a. Engineering Design and Operations Plan (EDOP) for Cell 2B of the Ash Monofill – Revision 4. Rawhide Energy Station, Platte River Power Authority, Fort Collins, Colorado, December 2021.
- AECOM. 2021b. Solid Waste Disposal Facility Run-on and Run-off Control System Plan, Platte River Power Authority. October 7.
- AECOM. 2024. Platte River Power Authority – Rawhide Station Annual Ash Monofill Inspection Report. January 18.
- AECOM. 2025. Platte River Power Authority – Rawhide Station Annual Ash Monofill Inspection Report. January 17.
- CDPHE. 2010. Approval of Construction Quality Assurance Report, Rawhide Energy Station Coal Ash Disposal Facility. March 12.
- Hershey, L. A. and Schneider Jr., P. A. 1972. Geologic Map of the Lower Cache La Poudre River Basin, North-Central Colorado. U.S. Geological Survey Miscellaneous Geologic Investigations Map I-687.
- Platte River Power Authority (PRPA). 1980. Engineering Report and Operational Plan for the Solid Waste Disposal Facility, Rawhide Energy Project. December.
- PRPA. 2017. Fugitive Dust Control, Compliance Monitoring, and Documentation for Fugitive Particulate Emission Sources. November.
- PRPA. 2025. Monofill Annual Volume Summary (file information).
- Smith Geotechnical. 2007. Revised Design and Operations Plan for the Solid Waste Disposal Facility, Rawhide Energy Station. November.

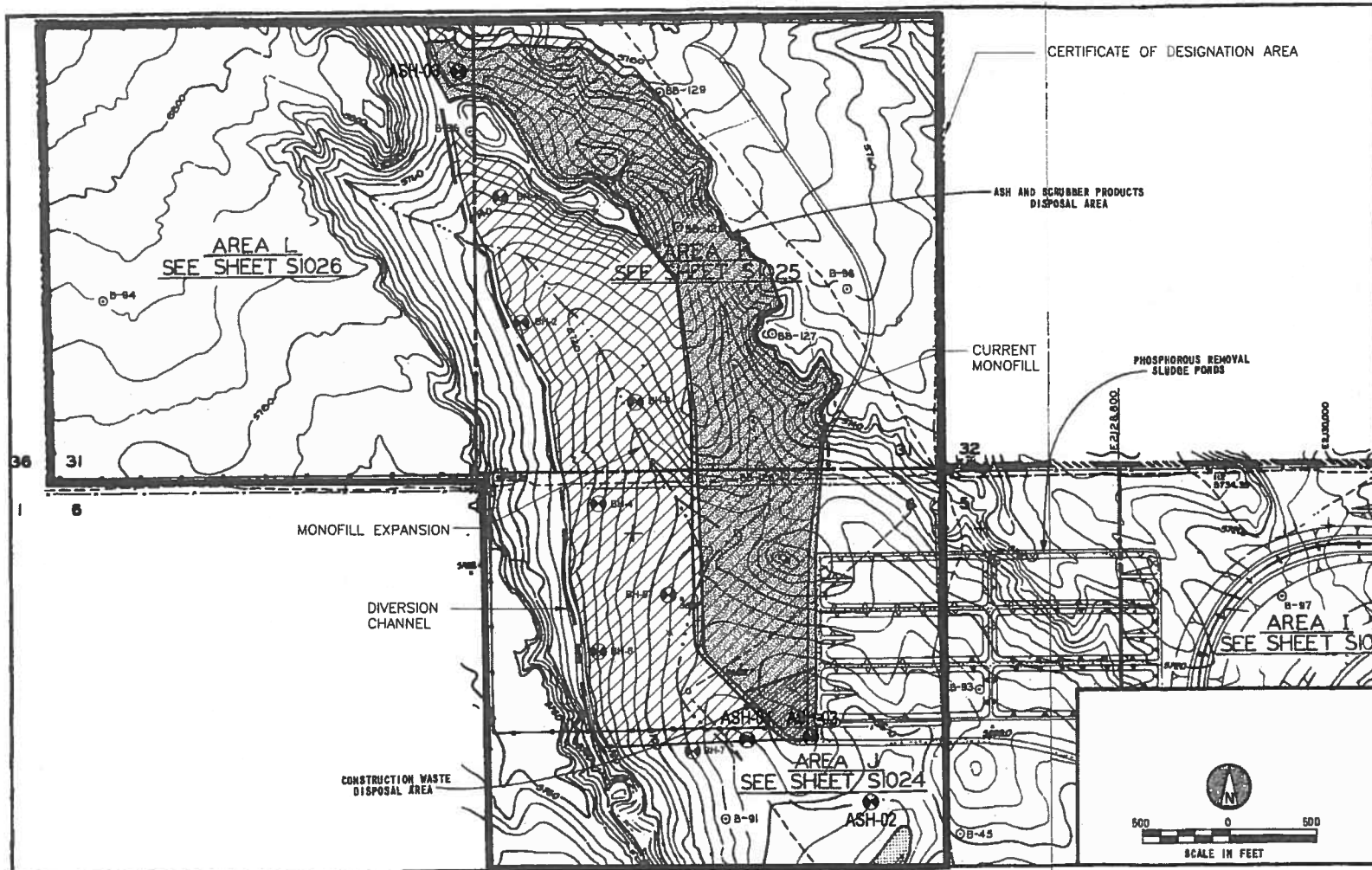
Figures





**Attachment 1
Revised Design and
Operations Plan for the
Solid Waste Disposal
Facility, Rawhide Energy
Station, November 2007
(selected figures)**



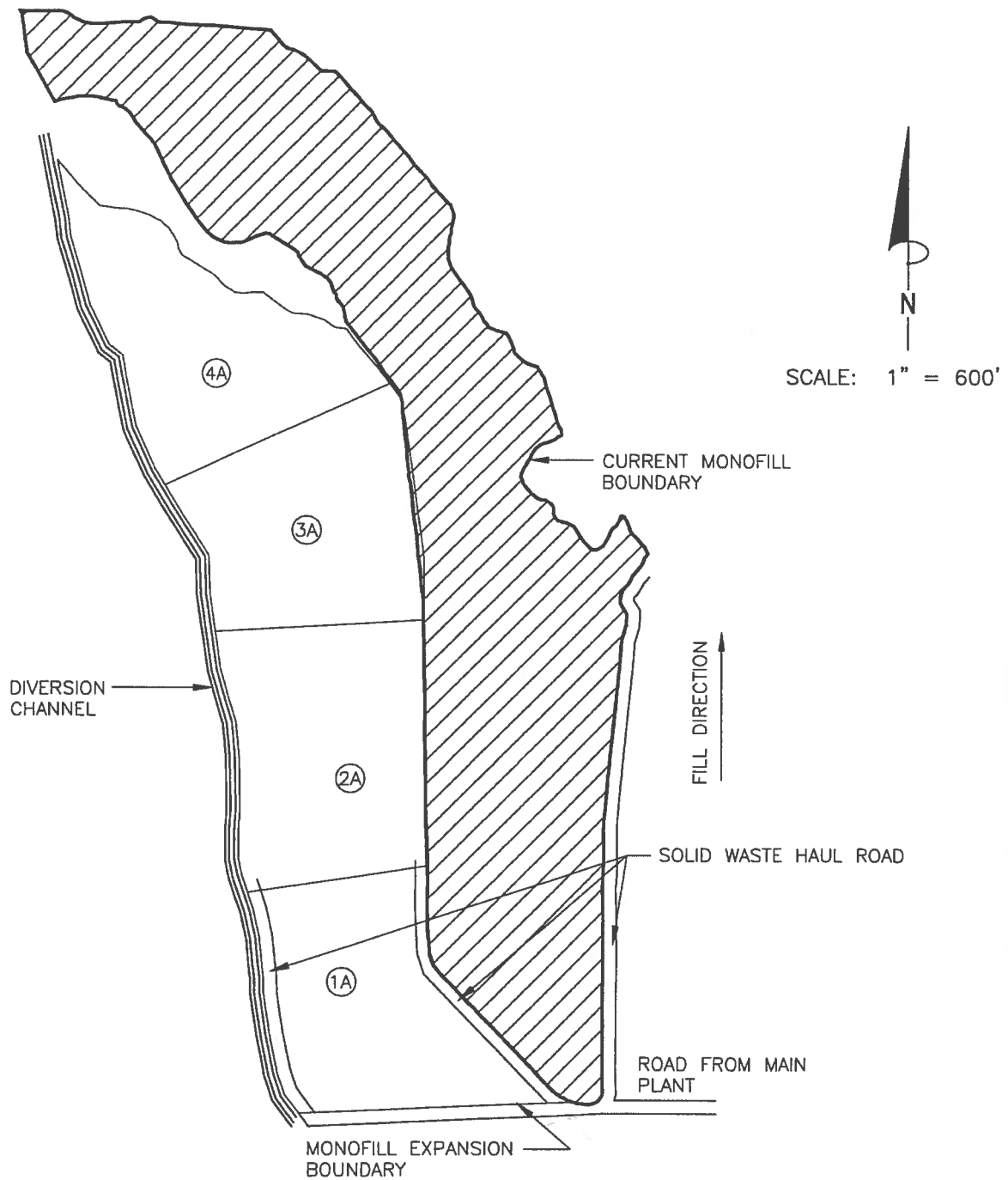


Reference Smith Geotechnical 2007 Figure 1

Job No	60431998
Prepared By	JMC
Date	4/18/16

SUBSURFACE BORING
LOCATIONS FOR CELL 2

FIG. 1.3



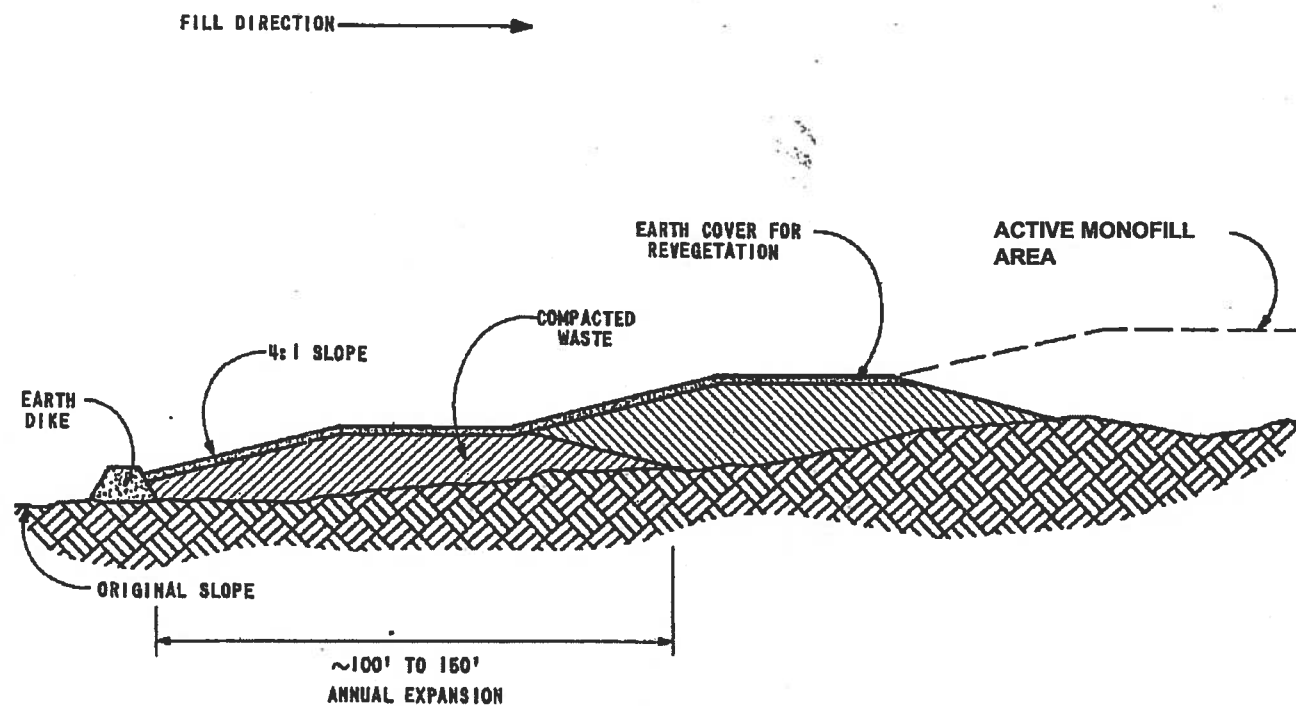
(REFERENCE PLATTE RIVER 1980 FIGURE 11)

Project: 07.028

Date: November 2007

FIGURE 2 SOLID WASTE DISPOSAL SITE FILL SEQUENCE

SG Smith
Geotechnical
ENGINEERING CONSULTANTS



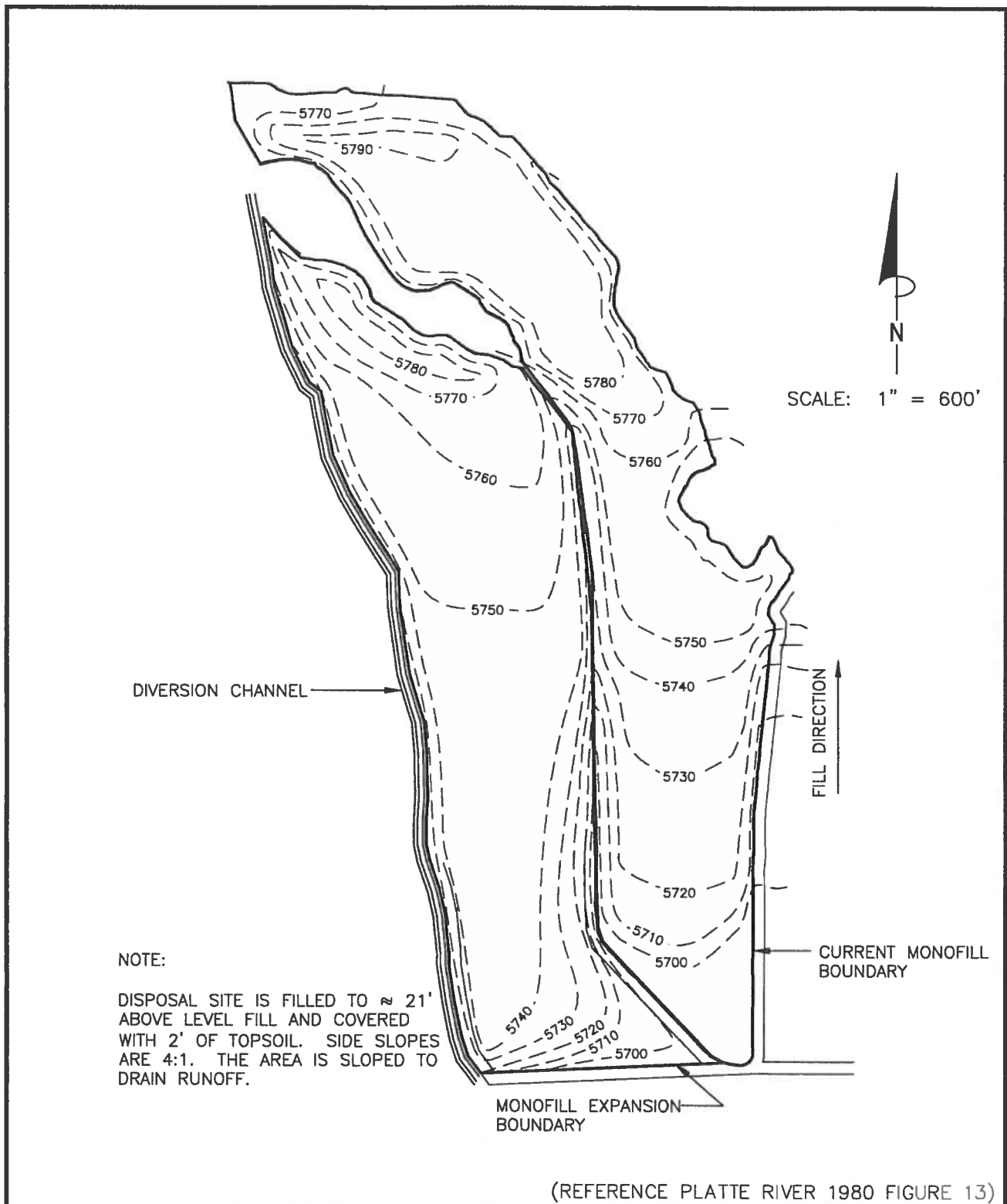
(REFERENCE PLATTE RIVER 1980 FIGURE 12)

Project: 07.028

Date: November 2007

FIGURE 3
FILLING AND RECLAMATION OPERATION,
TYPICAL NORTH-SOUTH CROSS SECTION

SG Smith
 Geotechnical
 ENGINEERING CONSULTANTS



Project: 07.028

Date: November 2007

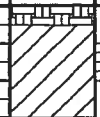


FIGURE 4
SOLID WASTE DISPOSAL SITE FINAL
CONTOURS

SG Smith
Geotechnical
ENGINEERING CONSULTANTS

BORING LOG

BORING NO. BH-1


PROJECT Rawhide Ash Landfill		JOB NO. 07.028	SHEET 1	OF 1
CLIENT PRPA		FIELD ENGINEER Kent Flowers		
DRILLING COMPANY High Plains Drilling		DRILL RIG CME-55 Buggy with 4"CFA		
LOCATION	ELEVATION Grade	DATE 07/18/07		

DEPTH (Feet)	LOG	DESCRIPTION OF MATERIAL	BLOWS/6 IN. INCREMENTS (PER FOOT)	REC.	REMARKS
0		TOPSOIL: CLAY: tan, damp, very stiff, plastic, with fine grained sand	9/17 (26)	4	
5		CLAYSTONE: tan moist, very soft, complete weathering, plastic	50 for 12" (>50)	4	
10		CLAYSTONE: tan moist, very soft, very severe weathering, plastic EOH:	50 for 8" (>50)	4	
15					
20					
25					
30					

BORING LOG

BORING NO. BH-2

PROJECT Rawhide Ash Landfill		JOB NO. 07.028		SHEET OF 1 1	
CLIENT PRPA		FIELD ENGINEER Kent Flowers			
DRILLING COMPANY High Plains Drilling		DRILL RIG CME-55 Buggy with 4"CFA			
LOCATION		ELEVATION Grade		DATE 07/18/07	

DEPTH (Feet)	LOG	DESCRIPTION OF MATERIAL	BLOWS/6 IN. INCREMENTS (PER FOOT)	REC.	REMARKS
0		TOPSOIL:			
5		CLAYSTONE: tan moist, very soft, complete weathering, plastic	10 / 16 (26)	4	
10		CLAYSTONE: tan, moist, soft. very severe weathering. plastic EOH:	50 for 11" (>50)	4	
15					
20					
25					
30					

BORING LOG

BORING NO. BH-3

PROJECT Rawhide Ash Landfill		JOB NO. 07.028		SHEET 1 OF 1	
CLIENT PRPA		FIELD ENGINEER Kent Flowers			
DRILLING COMPANY High Plains Drilling		DRILL RIG CME-55 Buggy with 4"CFA			
LOCATION		ELEVATION Grade	DATE 07/18/07		

DEPTH (Feet)	LOG	DESCRIPTION OF MATERIAL	BLOWS/6 IN. INCREMENTS (PER FOOT)	REC.	REMARKS
0		TOPSOIL:			
		CLAY: tan, damp, very stiff, plastic, with fine grained sand	8/9 (17)	4	
5		CLAY: tan, damp, plastic, very stiff, with fine grained sand	9/11 (20)	4	
10		CLAYSTONE: tan, moist, very soft, very severe weathering, plastic EOH:	50 for 12" (>50)	4	
15					
20					
25					
30					

BORING LOG

BORING NO. BH-4

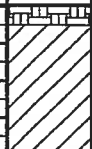


PROJECT Rawhide Ash Landfill		JOB NO. 07.028	SHEET 1	OF 1
CLIENT PRPA		FIELD ENGINEER Kent Flowers		
DRILLING COMPANY High Plains Drilling		DRILL RIG CME-55 Buggy with 4"CFA		
LOCATION	ELEVATION Grade	DATE 07/18/07		

DEPTH (Feet)	LOG	DESCRIPTION OF MATERIAL	BLOWS/6 IN. INCREMENTS (PER FOOT)	REC.	REMARKS
0		TOPSOIL:			
5		CLAY: tan, damp, stiff, plastic, with fine grained sand	6/4 (10)	4	
10		CLAYSTONE: tan, moist, very soft, complete weathering, plastic EOH:	14/15 (29)	4	
15		CLAYSTONE: tan, moist, soft very severe weathering, plastic EOH:	50 for 7" (>50)	4	
20					
25					
30					

BORING LOG

BORING NO. BH-5

PROJECT Rawhide Ash Landfill		JOB NO. 07.028		SHEET OF 1 1	
CLIENT PRPA		FIELD ENGINEER Kent Flowers			
DRILLING COMPANY High Plains Drilling		DRILL RIG CME-55 Buggy with 4"CFA			
LOCATION		ELEVATION Grade		DATE 07/18/07	

DEPTH (Feet)	LOG	DESCRIPTION OF MATERIAL	BLOWS/6 IN. INCREMENTS (PER FOOT)	REC.	REMARKS
0		TOPSOIL:			
5		CLAYSTONE: tan, moist, very soft, complete weathering, plastic	11/18 (29)	4	
10		CLAYSTONE: tan, moist, soft, very severe weathering, plastic EOH: EOH:	50 for 11" (>50)	4	
15					
20					
25					
30					

BORING LOG

BORING NO. BH-6

PROJECT		JOB NO.		SHEET OF	
Rawhide Ash Landfill		07.028		1 1	
CLIENT		FIELD ENGINEER			
PRPA		Kent Flowers			
DRILLING COMPANY		DRILL RIG			
High Plains Drilling		CME-55 Buggy with 4"CFA			
LOCATION		ELEVATION		DATE	
		Grade		07/18/07	

DEPTH (Feet)	LOG	DESCRIPTION OF MATERIAL	BLOWS/6 IN. INCREMENTS (PER FOOT)	REC.	REMARKS
0		TOPSOIL:			
5		CLAY: tan moist, stiff, plastic, with fine grained sand	5/8 (13)	4	
10		CLAYSTONE: tan, moist, very soft, very severe weathering, plastic EOH:	50 for 12" (>50)	4	
15					
20					
25					
30					

BORING LOG

BORING NO. BH-7

PROJECT Rawhide Ash Landfill		JOB NO. 07.028		SHEET OF 1 1	
CLIENT PRPA		FIELD ENGINEER Kent Flowers			
DRILLING COMPANY High Plains Drilling		DRILL RIG CME-55 Buggy with 4"CFA			
LOCATION		ELEVATION Grade		DATE 07/18/07	

DEPTH (Feet)	LOG	DESCRIPTION OF MATERIAL	BLOWS/6 IN. INCREMENTS (PER FOOT)	REC.	REMARKS
0		TOPSOIL:			
		CLAY: tan moist, very stiff, plastic, with fine grained sand	9/8 (17)	4	
5		CLAY: tan moist, very stiff, plastic, with fine grained sand	9/10 (19)	4	
10		CLAYSTONE: tan, moist, very soft, complete weathering, plastic	11/19 (30)	4	
15		CLAYSTONE: tan, moist, soft, very severe weathering, plastic EOH:	50 for 9"	4	
20					
25					
30					

**Attachment 2
CDPHE Approval of
Modification to Engineered
Design and Operations
Plan, Rawhide Energy
Station Coal Ash Disposal
Facility, January 25, 2008**

STATE OF COLORADO

Bill Ritter, Jr., Governor
James B. Martin, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S. Laboratory Services Division
Denver, Colorado 80246-1530 8100 Lowry Blvd.
Phone (303) 692-2000 Denver, Colorado 80230-6928
TDD Line (303) 691-7700 (303) 692-3090
Located in Glendale, Colorado
<http://www.cdphe.state.co.us>



Colorado Department
of Public Health
and Environment

CERTIFIED MAIL #7005 1820 0000 3213 5517
Return Receipt Requested

January 25, 2008

Mr. Christopher R. Wood
Platte River Power Authority
2000 E. Horsetooth Road
Fort Collins, Colorado 80525

RE: Approval of Modification to Engineered Design and Operations Plan
 Rawhide Energy Station Coal Ash Disposal Facility
 Larimer County, Colorado
 SW/LAR/RAW 2.2

Dear Mr. Wood:

Thank you for providing the Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division ("the Division") with your request to modify the Engineered Design and Operations Plan ("EDOP") for the Rawhide Energy Station Coal Ash Disposal facility in Larimer County, Colorado ("the facility"). The EDOP was submitted to the Division under the requirements of the "Regulations Pertaining to Solid Wastes Sites and Facilities" (6 CCR 1007-2, "the Regulations") and the Section 30-20-100 *et. seq.* of the Colorado Revised Statutes ("Colorado Solid Waste Act," "the Act").

The proposed EDOP modification would allow the facility to expand the current footprint of waste management area for the facility's landfill to the west of the current waste disposal site. The expansion of approximately 60.91 acres would allow for the facility to begin management of wastes in the remainder of the entire permitted site area of 122.91 acres, as approved in the facility's Certificate of Designation granted by Larimer County. The expansion would include construction of a permanent surface water diversion canal to the western border of the proposed waste pile expansion. This diversion canal was originally proposed and approved in the original EDOP and will be constructed adjacent to the waste. The expansion is proposed to begin at the south of the permitted area, working its way to the north of the facility. Borehole sample data in support of the proposed expansion indicate that soil and ground water conditions in the area are similar to those observed in the current waste management area.

Mr. Christopher R. Wood
Platte River Power Authority
January 25, 2008
Page 2 of 2

Based on the information provided, the Division approves the modified EDOP as submitted. This EDOP modification incorporates by reference the Department's January 24, 2008 approved waiver for explosive gas monitoring at the site. As required under Section 3.2.7 of the Regulations, you must provide the Division and the local governing body having jurisdiction (Larimer County Commissioners) with a report documenting that the design construction for the expansion of the facility has been completed in accordance with the approved EDOP ("Construction Quality Assurance report," "CQA report") prior to accepting and managing waste in each proposed expansion module identified in the EDOP. The CQA report must be signed by a Colorado registered professional engineer and reviewed and approved by the Department. In addition, any financial assurance established for the facility must be adjusted to take into account the increase in acreage size where wastes are being managed. This information must be submitted in the facility's next financial assurance update due to the Division.

In closing, please note the Department is authorized to bill for its review of technical submittals pursuant to 30-20-109(2)(b). An invoice for the Division's review of the above referenced document will be transmitted under separate cover.

If you have any additional questions or concerns, please contact me at (303) 692-3347, or by e-mail at caren.johannes@state.co.us.

Sincerely,



Caren Johannes
Solid Waste Unit
Solid and Hazardous Waste Program

cc: Larimer County Commissioners
Mr. Rich Grossmann, Larimer County Department of Health and Environment

STATE OF COLORADO

Bill Ritter, Jr., Governor
James B. Martin, Executive Director

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TDD Line (303) 691-7700 (303) 692-3090
Located in Glendale, Colorado

<http://www.cdphe.state.co.us>



Colorado Department
of Public Health
and Environment

January 24, 2008

Mr. Christopher R. Wood
Platte River Power Authority
2000 E. Horsetooth Road
Fort Collins, Colorado 80525

RE: Waiver Request for Explosive Gas Monitoring
Design and Operations Plan, Coal Ash Disposal Facility
Rawhide Energy Station, Larimer County, Colorado
SW/LAR/RAW 2.5

Dear Mr. Wood:

Thank you for providing the Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division ("the Division") with your waiver request to delete requirements for explosive gas monitoring at the Rawhide Energy Station Coal Ash Disposal facility in Larimer County, Colorado ("the facility"). This request was made based on the non-putrescent nature of the material being disposed at the facility (waste bottom ash, phosphorus sludge and inorganic construction wastes) as per the facility's Design and Operations Plan and Certificate of Designation.

Based on the information provided, the Division approves the waiver as submitted. This waiver shall be incorporated into the facility's Design and Operation Plan. At any time the facility no longer meets the waiver criteria, the waiver is void and ceases to exist. We have consulted with Larimer County on our approval of the waiver. If you have any additional questions or concerns, please contact me at (303) 692-3347, or by e-mail at caren.johannes@state.co.us.

Sincerely,

Caren Johannes
Solid Waste Unit
Solid and Hazardous Waste Program

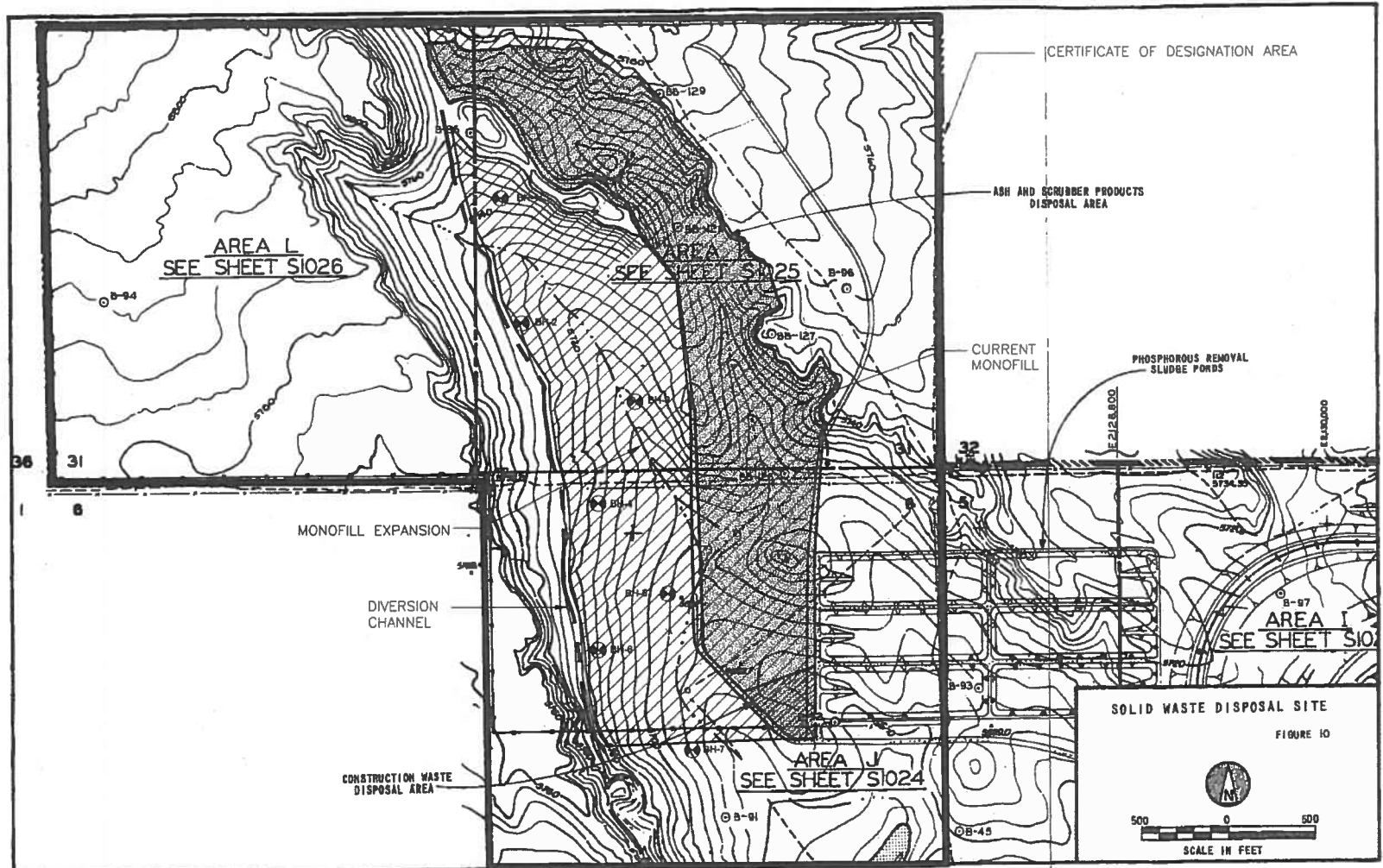
cc: Mr. Rich Grossmann, Larimer County Department of Health and Environment
Larimer County Commissioners

**Attachment 3
Engineering Report and
Operational Plan for the
Solid Waste Disposal
Facility, Rawhide Energy
Project, December 1980
(selected figures)**

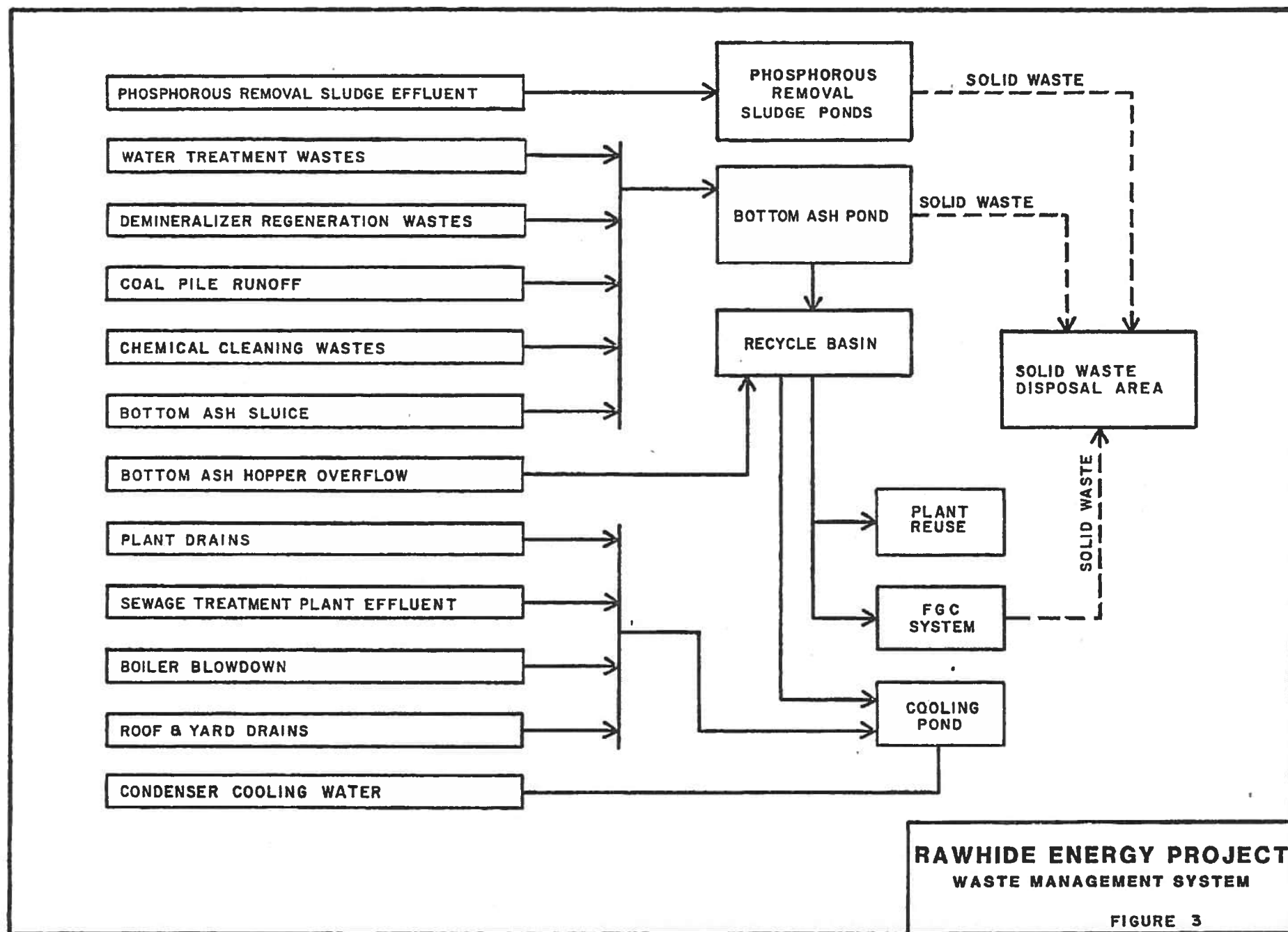
FIGURE 1
SOLID WASTE DISPOSAL SITE

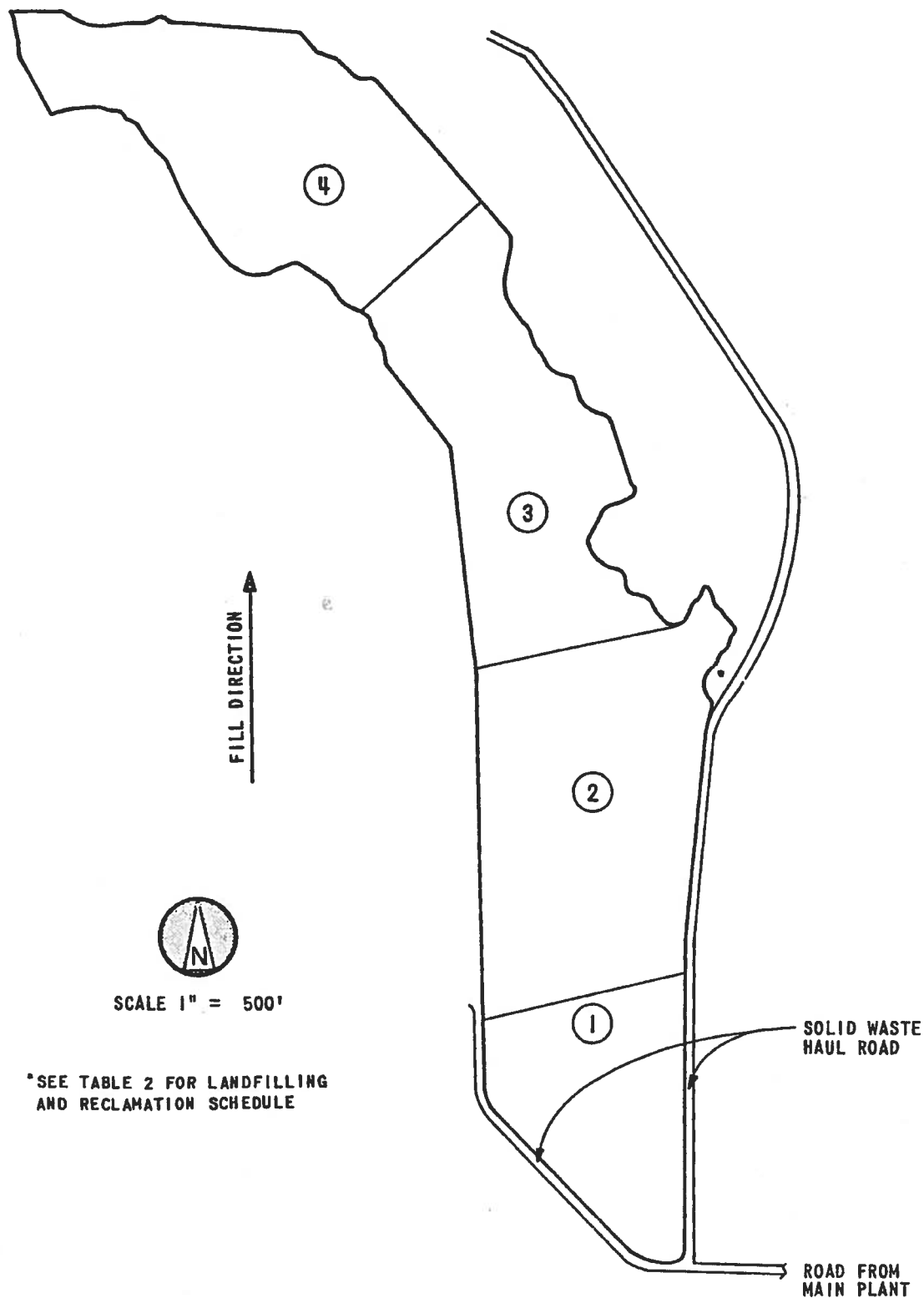
Project: 07.028

Date: November 2007



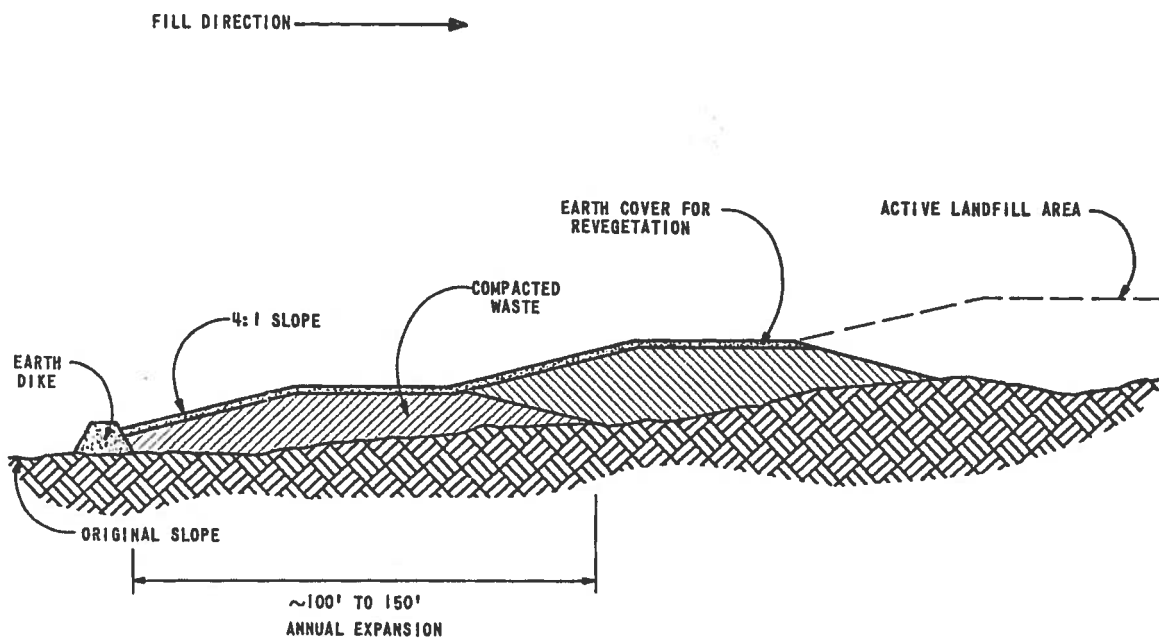
-REFERENCE PLATTE RIVER 1980 FIGURE 10





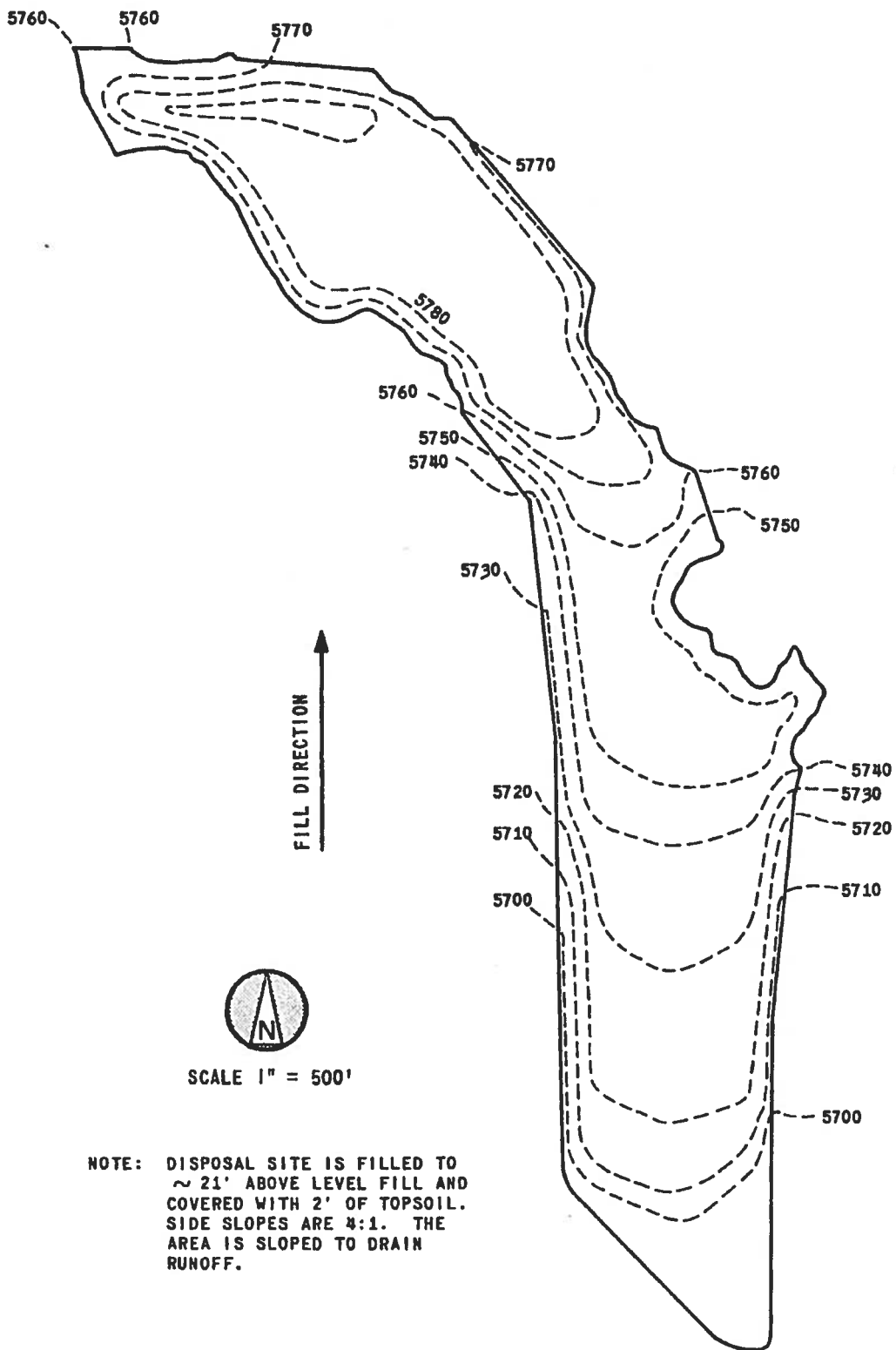
SOLID WASTE DISPOSAL
SITE FILL SEQUENCE * (CELL 1)

FIGURE II



LANDFILL AND RECLAMATION OPERATION
TYPICAL NORTH-SOUTH CROSS SECTION

FIGURE 12



SOLID WASTE DISPOSAL SITE
FINAL CONTOURS (CELL 1)

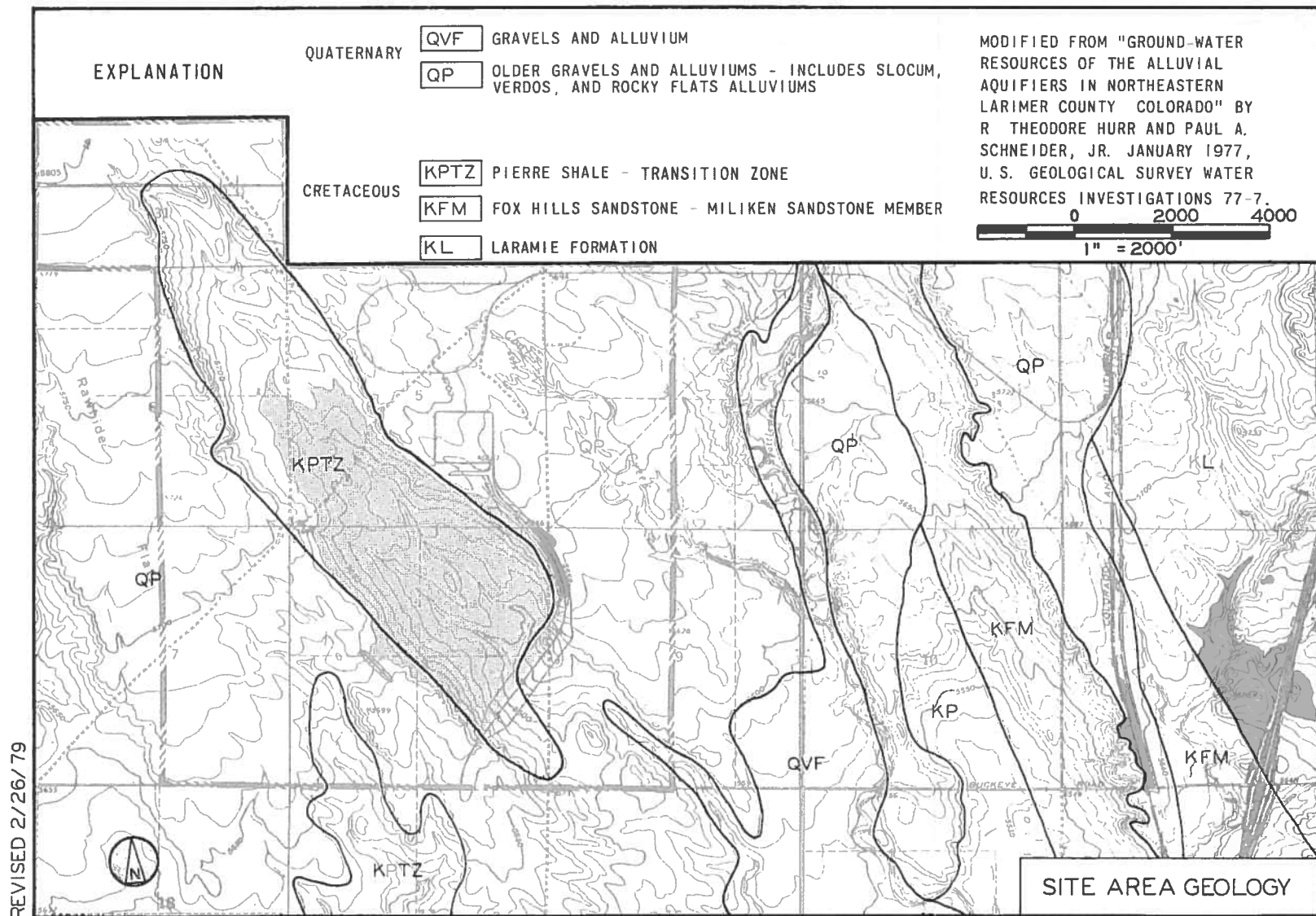




FIGURE - 2

LOG OF BORING

BLACK & VEATCH
Consulting Engineers

BORING NO. B-92

CLIENT Platte River Power Authority		PROJECT NO. 7750	SHEET OF 1 2
PROJECT Rawhide Energy Project		LOCATION N-558,940 E-2,127,170	ELEVATION 5681.3
DRILLING CONTRACTOR Hogan & Olhausen, Inc.		DRILL RIG TYPE AND NO. C.M.E. 55	DRILLER C. Dearmore
DIRECTION AND INCLINATION OF HOLE Vertical		DATE 2-17-78	INSPECTOR L. Almaleh

DEPTH IN FEET	LOG	CLASSIFICATION OF MATERIAL (DESCRIPTION)	ELEV. FT., MSL	SAMPLER & BIT	BLOWS/6 IN. INCREMENTS (PER FOOT)	SAMPLE RECOVERY	PENETROMETER READING, TSF	REMARKS
5		SILTY CLAY; tan-yellow, stiff, trace fine sand, moist, v calcareous (CL) (severely to completely weathered shale)		2" SB	15-20-22 (42)	0.8		Boring advanced w/4" diameter solid-stem auger
10		SHALE; sev wx, olv, sft, sandy, fossiliferous Continued on next page	5670.3					Boring con- tinued w/NWM double tube core barrel w/diamond bit using water as drilling fluid

LOG OF BORING

BLACK & VEATCH
Consulting Engineers

BORING NO. B-92


PROJECT Rawhide Energy Project					PROJECT NO. 7750		SHEET OF 2 2	
DEPTH IN FEET	LOG	UNIT	CLASSIFICATION OF MATERIAL (DESCRIPTION)	ELEV. FT., MSL	SAMPLE OR RUN	N	% REC % RQD	REMARKS
15		PIERRE SHALE	SHALE; weathered, olive green and gray, iron oxide stained, soft to medium, sandy, occasionally fossiliferous, calcareous in part	5661.9	R-1		$\frac{100}{15}$	20° joint
			R-2			$\frac{100}{8}$		
20			R-3			$\frac{92}{0}$		
			C.L.O.4'					
25			R-4			$\frac{98}{60}$		
					C.L.O.1'			20% circulation loss during Run 4
30			SHALE; gray, medium to moderately hard, silty, occasionally sandy, occasional thin fossiliferous zones, calcareous in part	5647.9	R-5		$\frac{96}{37}$	30% circulation loss during Run 5
					C.L.O.2'			
35								Bottom of boring @ 33.4'

FIGURE 206

P-ST-019A

LOG OF BORING

BLACK & VEATCH
Consulting Engineers

BORING NO. B-94

CLIENT Platte River Power Authority		PROJECT NO. 7750	SHEET 1 OF 1
PROJECT Rawhide Energy Project		LOCATION N-561,410 E-2,122,980	ELEVATION 5794.5
DRILLING CONTRACTOR Hogan & Olhausen, Inc.		DRILL RIG TYPE AND NO. C.M.E. 55	DRILLER C. Dearmore
DIRECTION AND INCLINATION OF HOLE Vertical		DATE 2-16-78	INSPECTOR L. Almaleh

DEPTH IN FEET	LOG	CLASSIFICATION OF MATERIAL (DESCRIPTION)	ELEV. FT., MSL	SAMPLER & BIT	BLOWS/6 IN. INCREMENTS (PER FOOT)	SAMPLE RECOVERY	PENETROMETER READING, TSF	REMARKS
5		CLAYEY SAND; tan, medium dense, moist, very calcareous (SC)		2" SB	6-5-8 (14)	0.9		Boring advanced w/4" diameter solid-stem auger
10		SILTY SAND; tan, dense, coarse to fine-grained, little to some fine gravel, moist, calc (SM)		2" SB	7-18-19 (37)	1.3		
15		SAND; light pale brown, medium dense to dense, trace of fine gravel, little silt, calcareous (SW-SM)		2" SB	10-13-15 (28)	1.4		
20		reddish-brown, less fines SAND; orng, med, fn-grnd, sm silt, mst, lmnt stng (SP-SM)	5775.6	2" SB 3" TW	13-23-10 (33)	1.4 0.3		
25		SANDY SHALE; sev wx, olv, soft, sm silt, sm cl, mst	5770.0	3" TW		0.5	45+	
								Bottom of boring @ 24.5'

FIGURE 208

P-ST-016A

LOG OF BORING

BLACK & VEATCH
Consulting Engineers

BORING NO. B-95

CLIENT Platte River Power Authority		PROJECT NO. 7750	SHEET 1 OF 2
PROJECT Rawhide Energy Project		LOCATION N-562,320 E-2,125,100	ELEVATION 5772.0
DRILLING CONTRACTOR Hogan & Olhausen, Inc.		DRILL RIG TYPE AND NO. C.M.E. 55	DRILLER C. Dearmore
DIRECTION AND INCLINATION OF HOLE Vertical		DATE 2-15-78	INSPECTOR L. Almaleh

DEPTH IN FEET	LOG	CLASSIFICATION OF MATERIAL (DESCRIPTION)	ELEV. FT., MSL	SAMPLER & BIT	BLOWS/6 IN. INCREMENTS (PER FOOT)	SAMPLE RECOVERY	PENETROMETER READING, TSF	REMARKS
5		SILTY SAND; crs to fn-grnd, tan to white, medium dense, trace fine gravel, moist, calcareous (SM-SC)		2" SB	3-7-7 (14)	1.2		Boring advanced w/4" diameter solid-stem auger
		clay content increasing						
10		alternating layers of SM and SC		2" SB	7-4-4 (8)	1.2		
15		SHALE; severely to com weathered, gray-green, little silt, moist, calcareous	5756.6	2" SB	10-14-19 (33)			
		Continued on next page						
								Boring con- tinued w/NWM double tube core barrel w/diamond bit using water as drilling fluid

LOG OF BORING

BLACK & VEATCH
Consulting Engineers

BORING NO. B-95

PROJECT Rawhide Energy Project						PROJECT NO. 7750	SHEET 2	OF 2
DEPTH IN FEET	LOG	UNIT	CLASSIFICATION OF MATERIAL (DESCRIPTION)	ELEV. FT., MSL	SAMPLE OR RUN	N	% REC % RQD	REMARKS
20		PIERRE SHALE	SHALE; severely weathered, olive green and gray, soft to medium, silty, sandy, iron oxide stained		R-1		$\frac{69}{0}$	5° joint 20° joint approximate 5 gallon water loss during Run 3 50% circulation loss from 31.1' to 34.0'
					C.L.1.0'			
					R-2		$\frac{100}{0}$	
25					R-3		$\frac{100}{38}$	
					R-4		$\frac{43}{0}$	
					C.L.0.4'			
30			SHALE; slightly weathered, gray, medium to moderately hard, silty, sandy, fossi- liferous, calcareous in part	5740.9	R-5		$\frac{70}{15}$	
					C.L.0.6'			
					R-6		$\frac{100}{66}$	
35					R-7		$\frac{64}{40}$	
				5733.4	C.L.0.9'			
40								Bottom of boring @ 38.6'

FIGURE 210

P-ST-019A

LOG OF BORING

BLACK & VEATCH
Consulting Engineers

BORING NO. B-96

CLIENT Platte River Power Authority		PROJECT NO. 7750	SHEET OF 1 2
PROJECT Rawhide Energy Project		LOCATION N-561,410 E-2,127,270	ELEVATION 5761.5
DRILLING CONTRACTOR Hogan & Olhausen, Inc.		DRILL RIG TYPE AND NO. C.M.E. 55	DRILLER C. Dearmore
DIRECTION AND INCLINATION OF HOLE Vertical		DATE 2-17-78	INSPECTOR L. Almaleh

DEPTH IN FEET	LOG	CLASSIFICATION OF MATERIAL (DESCRIPTION)	ELEV. FT., MSL	SAMPLER & BIT	BLOWS/6 IN. INCREMENTS (PER FOOT)	SAMPLE RECOVERY	PENETROMETER READING, TSF	REMARKS
5		SAND; white, medium dense, coarse to fine-grained, little to some silt, little fine gravel, moist, very calcareous (SM)		2" SB	5-5-12 (17)	1.2		Boring advanced w/4" diameter solid-stem auger
		(SP-SM)		2" SB	12-19-25 (44)	1.5		
10				3" TW		2.1	2.5	
15		medium dense, trace to some fine gravel (SP-SM) a layer of silt (ML) at ≈ 16'		2" SB	5-10-12 (22)	1.2		
20		SAND; light brown, dense, coarse to fine-grained, some fine gravel, trace silt (SW-SM)		2" SB	18-25-25 (50)	1.4		
25		becoming very dense		2" SB	20-38-35 (73)	1.5		
30				2" SB	30-40-25 (65)	1.5		
35		Continued on next page						

FIGURE 211

LOG OF BORING

BORING NO. B-96


PROJECT Rawhide Energy Project					PROJECT NO. 7750		SHEET OF 2 2	
DEPTH IN FEET	LOG	CLASSIFICATION OF MATERIAL (DESCRIPTION)	ELEV. FT., MSL	SAMPLER & BIT	BLOWS/6IN. INCREMENTS (PER FOOT)	SAMPLE RECOVERY	PENETROMETER READING, TSF	REMARKS
		reddish-tan, little silt		2" SB	25-37-33 (70)	1.5		
40		trace fine gravel, trace clay (SW)		2" SB	21-50-45 (95)	1.5		
45				2" SB	32-43-45 (88)	1.5		
50		SHALE; sev wx, olv-grn, sft ltl fn snd, mst, v fs1	5710.1	3" TW		1.0	4.5	
55								Bottom of boring @ 51.4'

FIGURE 212






P-ST-017A



BLACK & VEATCH
CONSULTING ENGINEERS

LOG OF BORING

BORING NO. BB-126

CLIENT				PROJECT NO.		ELEVATION	SHEET OF	
Platte River Power Authority				7750		5711.0	1 1	
PROJECT				LOCATION		DATE:	START	FINISH
Rawhide Energy Project				N-560,330 E-2,126,870			6/1/79	6/1/79
DEPTH (FEET)	PERCENT RECOVERY	RQD	SPT N VALUE	SAMPLE LOG	CLASSIFICATION	ELEVATION (FEET)	UNIT	REMARKS
0					Silty Clay; dark grayish-brown; firm; moist; trace roots; trace gravel (topsoil)		CL	Boring drilled w/6" diameter
1							CL	hollow-stem
2					Sandy Clay; pale yellow; firm; dry; highly calc; trace gravel			auger
3								
4			49		Clayey Sand; light olive-brown; dense; fine to coarse grained; dry; numerous gravel; highly calcareous	5704.5	SC	
5								
6								
7								
8			58		Shale; silty; olive; severely ironstained; highly weathered			
9								
10								
11								
12								
13								
14			57/7.5'		grading dark olive-gray; less ironstaining; moderately weathered			Boring continued w/NX split tube core
15								barrel w/car-
16								bide insert bit
17	88	0			highly calcareous			using water as
18					grading olive			drilling fluid
19						5691.6		
20								Bottom of
1								boring at 19.4'
2								
3								
4								
5								
6								
7								
8								
9								
30								
1								
2								
3								
4								
5								
6								
7								
8								
9								
40								

P-ST-036A



BLACK & VEATCH
CONSULTING ENGINEERS

LOG OF BORING

BORING NO. BB-127

CLIENT				PROJECT NO.		ELEVATION	SHEET OF	
Platte River Power Authority				7750		5751.0	1 1	
PROJECT				LOCATION		DATE:	START	FINISH
Rawhide Energy Project				N-561,120 E-2,126,800			6/1/79	6/1/79
DEPTH (FEET)	PERCENT RECOVERY	RQD	SPT N VALUE	SAMPLE LOG	CLASSIFICATION	ELEVATION (FEET)	UNIT	REMARKS
0					Sandy Clay; dark brown; firm; slightly moist; trace roots; numerous gravel (Topsoil)		CL	Boring drilled w/6" diameter hollow-stem auger
1								
2								
3			23		Clayey Sand; pink; medium dense; fine grained; dry; calcareous; trace fine gravel		SC	
4								
5								
6					Gravelly Sand; pink; dense; fine to coarse grained; very slightly moist; calcareous		SP	
7								
8			39					
9								
10					Sandy Gravel; light brown		GP	
11								
12					Clay; light yellowish-brown; very stiff; very slightly moist; highly calcareous		CL	
13			25					
14								
15								
16						5733.0		
17								
18			32		Shale; silty; sandy; olive; slightly calcareous; ironstained throughout; highly weathered			
19								
20								
21								PIERRE SHALE
22								
23								
24			180		grading olive gray			
25								
26								
27								
28								
29			155		grading dark olive gray; moderately weathered			
30								
31								Boring continued w/NX split tube core barrel w/car-bide insert bit using water as drilling fluid
32								
33			50/3"		grading dark gray; slightly weathered			
34								
35					grading very dark gray; thick bedded; fresh below 34.0'			
36	100	100						
37								
38								
39						5712.1		
40								Bottom of boring at 38.9'

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

























FIGURE _____



BLACK & VEATCH
CONSULTING ENGINEERS

LOG OF BORING

BORING NO. BB-128

CLIENT				PROJECT NO.		ELEVATION	SHEET OF	
Platte River Power Authority				7750		5731.7	1	1
PROJECT				LOCATION		DATE:	START	FINISH
Rawhide Energy Project				N-561,760 E-2,126,250		6/4/79	6/4/79	
DEPTH (FEET)	PERCENT RECOVERY	RQD	SPT N VALUE	SAMPLE LOG	CLASSIFICATION	ELEVATION (FEET)	UNIT	REMARKS
0					Silty Clay; brown; soft; dry; trace roots; some sand (Topsoil)		CL	Boring drilled w/6" diameter hollow-stem auger
1					Sandy Clay; yel-br; firm; dry; trace gravel; highly calcareous		CL	
2					Silty Clay; olive; stiff; dry; some sand; calcareous (Residual Shale)	5725.7	CL	
3								
4								
5								
6					Shale; silty; sandy; olive-gray; ironstained throughout; highly weathered		PIERRE SHALE	Boring contin- ued w/NX split tube core barrel w/car- bide insert bit using water as drilling fluid
7								
8								
9			94					
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20			127					
21								
22	93	31						
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								
37								
38								
39								
40								
						5707.3		Bottom of boring at 24.4'































P-ST-036A



BLACK & VEATCH
CONSULTING ENGINEERS

LOG OF BORING

BORING NO. BB-129

CLIENT				PROJECT NO.		ELEVATION	SHEET OF	
Platte River Power Authority				7750		5777.0	1	2
PROJECT			LOCATION			DATE:	START	FINISH
Rawhide Energy Project			N-562,510 E-2,126,150				6/4/79	6/4/79
DEPTH (FEET)	PERCENT RECOVERY	RQD	SPT N VALUE	SAMPLE LOG	CLASSIFICATION	ELEVATION (FEET)	UNIT	REMARKS
0					Sandy Clay; dark brown; firm; trace roots; some gravel (Topsoil)		CL	Boring drilled w/6" diameter hollow-stem auger
1					Sandy Gravel; light brown; medium dense		GP	
2							SP	
3			45		Sand; brown; dense; fine to coarse grained; dry; numerous gravel; calcareous			
4								
5								
6								
7					Silt; very pale brown; very stiff; dry; highly calcareous			
8			28				ML	
9								
10								
11								
12								
13			48		Sand; light brown; medium dense; fine to medium grained; dry; calcareous; trace gravel; some clay			
14								
15								
16								
17								
18					grading fine to coarse grained; numerous gravel; trace silt			
19			54				SP	
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								
37								
38								
39								
40								
Continued on next page								

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BLACK & VEATCH
CONSULTING ENGINEERS

LOG OF BORING

BORING NO. BB-129

CLIENT				PROJECT NO.		ELEVATION		SHEET OF	
Platte River Power Authority				7750		5777.0		2 2	
PROJECT				LOCATION		DATE: START FINISH			
Rawhide Energy Project				N-562,510 E-2,126,150		6/4/79 6/4/79			
DEPTH (FEET)	PERCENT RECOVERY	RQD	SPT N VALUE	SAMPLE LOG	CLASSIFICATION	ELEVATION (FEET)	UNIT	REMARKS	
40									
1									
2									
3									
4			15		trace gravel		CL		
5									
6									
7						5730.5			
8					Shale; silty; sandy; olive-gray; medium bedded; ironstained throughout; highly weathered				
9			137/9"						
50					fractures at intervals of < 0.1' calcareous				
1									
2	71	71			below 51.2' grading dark gray & olive mottled; moderately weathered				
3						5722.6	PIERRE SHALE	Boring cont'd w/NX split tube core barrel w/car- bide insert bit using water as drilling fluid	
4									
5									
6									
7									
8									
9									
0									
1									
2									
3									
4									
5									
6									
7									
8									
9									
0								Bottom of boring at 54.4'	

P-ST-036A

FIGURE _____

**Attachment 4
CDPHE Approval of
Construction Quality
Assurance Report,
Rawhide Energy Station
Coal Ash Disposal Facility,
March 12, 2010**

STATE OF COLORADO

Bill Ritter, Jr., Governor
James B. Martin, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S. Laboratory Services Division
Denver, Colorado 80246-1530 8100 Lowry Blvd.
Phone (303) 692-2000 Denver, Colorado 80230-6928
TDD Line (303) 691-7700 (303) 692-3090
Located in Glendale, Colorado
<http://www.cdphe.state.co.us>



Colorado Department
of Public Health
and Environment

March 12, 2010

Mr. Christopher R. Wood
Platte River Power Authority
2000 E. Horsetooth Road
Fort Collins, Colorado 80525

RE: Approval of Construction Quality Assurance Report
 Rawhide Energy Station Coal Ash Disposal Facility
 Larimer County, Colorado
 SW/LAR/RAW 2.3

Dear Mr. Wood:

Thank you for providing the Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division ("the Division") with the Construction Quality Assurance Report for the Monofill Expansion Project ("the CQA Report") for the Rawhide Energy Station Coal Ash Disposal facility in Larimer County, Colorado ("the facility"). The CQA Report was submitted to the Division under the requirements of the "Regulations Pertaining to Solid Wastes Sites and Facilities" (6 CCR 1007-2, "the Regulations") and the Section 30-20-100 *et. seq.* of the Colorado Revised Statutes ("Colorado Solid Waste Act," "the Act"). The CQA Report as reviewed by the Division included both the November 2009 report on the expansion project received by the Division January 5, 2010 and the "as-built" drawings requested from the facility February 8, 2010 and received by the Division on February 16, 2010.

The CQA Report provides a description of final construction and engineered drawings of the cell expansion conducted at the facility in September and October 2009. The report also includes information concerning the redesign of the drainage swale for the expansion at the facility to divert and control storm water drainage from the monofill for the 100-year, 24-hour event and construction of an embankment berm at the southern end of the monofill expansion to contain drainage from a 25-year, 24-hour event. The drainage swale was reconfigured as a trapezoidal channel with a base width of 30 feet and a maximum grade of 1.25 percent from its original design of base width 10 feet and maximum grade

Mr. Christopher R. Wood
Platte River Power Authority
March 12, 2010
Page 2 of 2

of 0.5 percent. The report states that the original dimensions for the swale, when overlaid on the topographic map for the expansion area, would have caused erosion problems for the monofill.

Based on our review, the Division approves the CQA Report as submitted. Please ensure that financial assurance documents for the facility are adjusted to take into account the increase in area where wastes are being managed.

In closing, please note the Department is authorized to bill for its review of technical submittals pursuant to 30-20-109(2)(b). An invoice for the Division's review of the above referenced document will be transmitted under separate cover.

If you have any additional questions or concerns, please contact me at (303) 692-3347, or by e-mail at caren.johannes@state.co.us.

Sincerely,

A handwritten signature in black ink, appearing to read 'Caren Johannes', followed by a long horizontal line extending to the right.

Caren Johannes
Solid Waste Unit
Solid and Hazardous Waste Program

cc: Larimer County Commissioners
Mr. Rich Grossmann, Larimer County Department of Health and Environment

Attachment 5 Summary of CCR Monofill Volume

Rawhide Energy Station
Annual Waste Summary

YEAR #	YEAR	Lime Used	Sulfate Collected	Activated Carbon Used	Wastewater Treatment Tank Residuals	Fly Ash Sales	Fly Ash Waste	Bottom Ash Waste	BAT Closure	Total CCR Monofill Waste	Section #	East & West Monofill Waste Accumulation		Cumulative with Topsoil @ 2 feet	West Monofill Waste Accumulation		Cumulative with Topsoil @ 2 feet
		(tons)	(tons)	(tons)	(tons)	(tons)	(tons)	(tons)	(tons)	(tons)		(cubic yds) ¹	(acre feet)	(acre feet)	(cubic yds) ¹	(acre feet)	(acre feet)
1	1984	2,950.0	2,544.0				32,818.0	4,821.9		37,639.9	1	37,175.2	23.0	27.6			
2	1985	6,006.0	7,848.7				59,902.0	8,126.0		68,028.0	1	104,363.3	64.7	69.3			
3	1986	4,375.5	6,133.5				53,495.4	7,585.9		61,081.3	1	164,690.5	102.1	106.7			
4	1987	4,384.5	6,266.6				59,587.9	8,635.9		68,223.8	1	232,072.0	143.8	148.4			
5	1988	5,800.0	8,108.1				70,164.6	9,927.6		80,092.2	2	311,175.4	192.9	197.5			
6	1989	4,926.0	7,505.7				62,657.0	8,863.3		71,520.3	2	381,812.7	236.7	240.9			
7	1990	4,660.0	6,860.8				61,660.2	8,848.1		70,508.3	2	451,450.6	279.8	284.0			
8	1991	3,970.0	6,425.0				54,832.3	7,841.9		62,674.2	2	513,351.0	318.2	322.4			
9	1992	4,174.0	6,367.1				57,662.4	8,315.5		65,977.9	2	578,514.3	358.6	362.8			
10	1993	5,725.0	7,865.5				68,607.5	9,708.9		78,316.4	2	655,863.8	406.5	410.7			
11	1994	4,578.0	5,923.8				58,120.7	8,403.3		66,524.0	2	721,566.5	447.3	451.5			
12	1995	3,961.8	4,780.1				54,257.5	8,032.2		62,289.6	2	783,087.1	485.4	489.6			
13	1996	4,337.6	5,368.2				61,666.8	9,169.6		70,836.4	2	853,049.0	528.7	532.9			
14	1997	4,214.1	5,246.2				58,838.0	8,713.7		67,551.8	2	919,766.8	570.1	574.3			
15	1998	5,122.1	5,878.9				58,472.4	8,377.3		66,849.7	3	985,791.1	611.0	615.2			
16	1999	5,599.7	6,518.5				70,115.3	10,234.8		80,350.1	3	1,065,149.2	660.2	663.2			
17	2000	4,098.6	5,196.0				54,911.1	8,050.0		62,961.1	3	1,127,333.0	698.8	701.8			
18	2001	5,738.1	6,513.4				68,526.4	9,930.9		78,457.2	3	1,204,821.6	746.8	749.8			
19	2002	5,381.4	6,802.3				65,465.9	9,402.7		74,868.6	3	1,278,765.9	792.6	795.6			
20	2003	5,402.4	6,896.2				70,595.5	10,287.7		80,883.2	3	1,358,650.6	842.1	845.1			
21	2004	4,879.4	6,807.6				72,293.7	10,695.3		82,989.0	3	1,440,615.0	892.9	895.9			
22	2005	4,298.5	5,007.1				60,262.7	8,992.4		69,255.1	3	1,509,015.1	935.3	938.3			
23	2006	4,814.7	6,528.3			804.8	69,283.0	10,224.7		78,702.9	3	1,586,746.4	983.5	986.5			
24	2007	5,177.8	7,347.4			1,227.9	72,482.3	10,580.7		81,835.1	3	1,667,571.1	1,033.6	1,036.6			
25	2008	4,300.8	6,234.1			1,476.1	62,593.9	9,186.9		70,304.6	1A	1,737,007.8	1,076.7	1,081.1	69,436.7	43.0	47.4
26	2009	5,025.8	8,044.3			12,226.5	73,032.6	10,581.6		71,387.7	1A	1,807,514.2	1,120.4	1,124.8	139,943.1	86.7	91.1
27	2010	4,750.5	7,554.2			5,583.2	72,323.0	6,668.7		73,408.5	1A	1,880,016.4	1,165.3	1,169.7	212,445.3	131.7	136.1
28	2011	4,745.9	7,400.3			11,008.4	72,177.5	6,670.1		67,839.2	1A	1,947,018.1	1,206.8	1,211.2	279,447.0	173.2	177.6
29	2012	4,237.8	6,560.0			9,572.2	66,126.1	6,147.6		62,701.6	1A	2,008,945.6	1,245.2	1,249.6	341,374.5	211.6	216.0
30	2013	4,548.5	6,692.3	69.1		17,763.9	72,439.2	6,792.2		61,467.4	1A	2,069,654.2	1,282.8	1,287.2	402,083.0	249.2	253.6
31	2014	4,942.5	6,829.9	89.1		8,954.3	73,317.9	6,828.5		71,192.1	1A	2,139,967.4	1,326.4	1,330.8	472,396.3	292.8	297.2
32	2015	4,661.7	5,803.1	82.4		9,326.5	66,283.1	6,192.9		63,149.5	2A	2,202,337.3	1,365.1	1,369.3	534,766.2	331.5	335.7
33	2016	4,924.1	6,741.1	98.2		8,611.2	73,418.9	6,850.6		71,658.3	2A	2,273,110.9	1,409.0	1,413.2	605,539.8	375.3	379.5
34	2017	4,854.0	7,020.2	119.4		8,484.7	72,603.4	6,734.4		70,853.1	2A	2,343,089.3	1,452.3	1,456.5	675,518.2	418.7	422.9
35	2018	4,182.6	5,589.8	108.4		11,771.5	61,876.5	5,777.3		55,882.4	2A	2,398,281.8	1,486.5	1,490.7	730,710.6	452.9	457.1
36	2019	4,199.2	5,591.3	130.1		20,313.3	52,055.7	18,057.9		59,721.0	2A	2,457,265.5	1,523.1	1,527.3	789,694.3	489.5	493.7
37	2020	4,296.0	5,427.4	130.5		12,189.4	50,879.7	17,582.5	121,656.9	187,783.6	2A	2,642,730.8	1,638.1	1,642.3	975,159.7	604.4	608.6
38	2021	3,274.9	4,942.8	118.4	8400.0	14,286.8	42,536.3	14,657.2		51,242.8	2A	2,693,341.0	1,669.4	1,673.6	1,025,769.9	635.8	640.0
39	2022	3,323.5	5,826.0	128.8		17,795.7	49,016.8	17,030.8		57,530.2	2A	2,750,161.0	1,704.6	1,708.8	1,082,589.9	671.0	675.2
40	2023	2,306.0	4,102.9	89.0		33,572.0	31,584.6	10,751.5		15,262.0	2B	2,765,234.6	1,714.0	1,718.2	1,097,663.4	680.4	684.6
41	2024	1,990.1	3,404.6	79.2		28,206.5	29,335.3	10,226.3		16,829.0	2B	2,781,855.8	1,724.3	1,728.5	1,114,284.6	690.7	694.9
42	2025	2,309.9	3,814.4	106.8		27,856.1	30,191.1	10,268.6		18,834.6	2B	2,800,457.9	1,735.8	1,740.0	1,132,886.8	702.2	706.4
Mean		4,463.1	6,150.4	103.8	8,400.0	13,051.5	60,201.7	9,304.2	121,656.9	65,251.0	Mean	66,677.6	41.3	41.4	62,938.2	39.0	39.2
Maximum		6,006.0	8,108.1	130.5	8,400.0	33,572.0	73,418.9	18,057.9	121,656.9	187,783.6	1984-07 Mean	69,482.1	43.1	43.2			
Limits/PTE		8,400	-	2,000	-	-	148,650	24,750	-	173,400	Notes: Bottom Ash Waste = (Coal Burned x % Bottom Ash). Assumes 70% Fly Ash and 30% Bottom Ash with						
Totals		187,449	258,318	1,349	8,400	261,031	2,528,470	390,776	121,657	2,835,464	¹ Assume 1.0125 tons per cubic yard						

Notes:

Total CCR waste for 2020 includes 120,155 cyds from BAT Impoundment decommissioning (reference: BAT Construction Completion Certification Report, AECOM, December 17, 2020).

Fly Ash Sales waste stream (removal) factored into Total CCR Monofill Waste beginning in 2006

Lime Used, Sulfate Collected, and Activated Carbon Used waste stream factored into Total CCR Monofill Waste beginning in 2019

Wastewater Treatment Tank Residuals and plant floor drain solids started being sent to Monofill in 2021. Waste stream to be placed every other year in Monofill.

**Attachment 6
Federal CCR Annual
Inspection Form**

Federal CCR Annual Inspection Form

Rev. 0

Page 1 of 2

Station: PRRA - Rawhide

CCR Unit: Ash Monofill

Date: 12/10/2025

Inspector(s): Jeremy Hurshman/Emily Yonker

Weather Conditions: sunny, 40s, breezy/windy

Ground Conditions: clear ground, no snow

Purpose of Inspection: Per the CCR Rule published by the USEPA and entered into the federal register on April 17, 2015, existing and new CCR landfills are required to be inspected annually by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of the CCR facility is in good condition and conforms to standard engineering practices for this type of facility.

Please refer to the attached figure to mark location of any identified conditions.

CCR UNIT FEATURE

CCR Placement

1) Is waste being handled or placed differently than standard station practices?

Yes

No

NA

Location ID # or map identifier

☒

☐

☐

minor amounts pushed past top of berm, outside lined area

Bench Conditions

2) Any signs of surface cracking?

☐

☒

☐

3) Any signs of depressions or sunken areas?

☐

☒

☐

Slope Conditions

4) Any signs of surface cracking?

☐

☒

☐

5) Any signs of surface movement? If yes, please categorize

☒

☐

☐

See 5c

5a) Sloughing (sliding of materials in sheets)

☐

☒

☐

5b) Sliding

☐

☒

☐

5c) Sinking

☒

☐

☐

depression on top of Cell 2A (unsure if sinking or material removed)

6) Any signs of erosion rills greater than 3 inches?

☐

☒

☐

7) Any signs of erosion gullies greater than 6 inches?

☐

☒

☐

8) Any signs of holes or animal burrows?

☒

☐

☐

east, north, and west face of Cell 1 (3 burrows total)

Haul Road Conditions

9) Any obstructions?

☐

☒

☐

10) Any noticeable damage? If yes, please categorize

☐

☒

☐

10a) Rutting

☐

☒

☐

10b) Sinking

☐

☒

☐

10c) Pot holes

☐

☒

☐

Erosion Controls

11) Any areas of active construction lacking erosion controls (silt fence)?

☐

☒

☐

12) Any signs that existing erosion controls are not properly functioning?

☐

☒

☐

13) Any evidence of insufficient vegetative cover?

☒

☐

☐

roadway driving into cell 2B from east, this strips on cell 1 (north end)

Liner System Conditions (prior to CCR placement or during active liner construction)

14) Any damage to liner protective cover?

☐

☒

☐

15) Any damage to liner system observed?

☐

☒

☐

Federal CCR Annual Inspection Form - CCR Landfills

Rev. 0

Page 2 of 2

Station: PRRA - Rawhide

CCR Unit: Ash Monofill

Date: _____

CCR UNIT FEATURE

Leachate Collection/Detection System

- 16) Any signs of obstruction to leachate collection/detection pipe outlets?
17) Any signs of obstruction to leachate flow(s) to storage lagoon(s)?

Yes	No	NA
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Location ID # or map identifier

Surface Water Controls (Diversion Channels/Collection Channels/Sedimentation Ponds)

- 18) Any signs of uncontrolled run-on to the landfill?
19) Any signs of uncontrolled run-off from the landfill
20) Any signs of obstruction in surface water conveyance channels?
21) Any cracking or separation in surface water conveyance channels?
22) Any signs of heaving or sinking of surface water conveyance channels?
23) Any signs of obstruction in culverts, drop boxes, or sumps?
24) Any signs of sedimentation pond malfunction (excessive sediment buildup)?
25) Any signs of excessive sedimentation pond water loss (leaking)?
26) Any signs of obstruction to sedimentation pond outlet structure (in pond)?
27) Any signs of obstruction to sedimentation pond effluent discharge?

Yes	No	NA
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

connection area from cell 1 to cell 2B, runoff down access road into cell 2B.

partially covered outfall to culvert located near monitoring well ASH-03
no pond
no pond
no pond
no pond

Fugitive Dust Controls

- 28) Any evidence that fugitive dust controls are not being used?

Yes	No	NA
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Other

- 29) Any nontypical operations occurring at facility? If yes, please describe.

Yes	No	NA
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Additional Comments: new vegetation near top of cell 2A; road with no cover entered cell 2B from cell 1/2A; rodent mitigation in progress

Individual Completing Form:

Jeremy Hurshman

Individual (Print/signature)

Emily Yonker

Individual (Print/signature)

**Attachment 7
Sample Platte River Weekly
Inspection Form**

Name of CCR Landfill:	<u>Rawhide Ash Monofill</u>	Qualified Inspector:	<u>Chris Wood</u>
		Date:	<u>9/24/2025</u>
Owner:	<u>Platte River Power Authority</u>	Time:	<u>9:45 AM</u>
Operator:	<u>Platte River Power Authority</u>	Weather:	<u>Sunny</u>

I. Perimeter Slope

1. How would you describe the vegetation on the crest and side slopes? (Check all that apply)

<input type="checkbox"/> Recently Mowed	Other (describe):
<input type="checkbox"/> Overgrown (Greater than 6-in.)	
<input checked="" type="checkbox"/> Good Cover	
<input type="checkbox"/> Sparse	
<input type="checkbox"/> Paved	
<input type="checkbox"/> Gravel	

2. Are there any areas of hydrophilic (lush, water-loving) vegetation? ☐ Yes ☒ No

If 'Yes', describe (size, location, severity, etc.) _____

3. Are there any trees or other undesired vegetation on the slope? ☐ Yes ☒ No

If 'Yes', describe (type of vegetation, size, location, etc.) _____

4. Is there an access ramp up the side slope or a road around the perimeter slope? ☒ Yes ☐ No

If 'Yes', describe (good condition, numerous cracks, newly paved, stone uniformly distributed, etc.) Ramp is in good condition and is a dirt road which is free from cracks.

5. Are there any depressions, ruts, or holes on the access ramp or road? ☐ Yes ☒ No

If 'Yes', describe (size, location, etc.) _____

6. Are there any cracks, sloughs, bulges, or indications of slope distress? ☐ Yes ☒ No

If 'Yes', describe (length and width, location and direction of cracking, slough, or distress, etc.) _____

7. Do any wet areas indicate seepage through the slope? ☐ Yes ☒ No

If 'Yes', describe (size, location, etc.) _____

8. Are there any active seeps (flowing water) from the slope of the slope? _____ Yes x No

If 'Yes', describe (size, location, flow quantity and color, etc.) _____

9. Are there any active seeps or wet areas at the toe of the slope? _____ Yes x No

If 'Yes', describe (size, location, etc.) _____

10. Other observations on the perimeter slope (changes since last inspection, etc.): _____

II. Stormwater Conveyance

1. Is stormwater being properly diverted by the existing infrastructure? x Yes _____ No

If 'Yes', describe (size, location, etc.) No stormwater to divert as of recent, but stormwater infrastructure is in good condition. There is a diversion berm along the upstream western perimeter of the site that prevents stormwater run-on.

2. Is the stormwater infrastructure in good condition? x Yes _____ No

If 'No', describe (Is there any erosion in or around the structures, signs of leakage or movement, etc.?).

III. Landfill Conditions

1. Describe operations in the landfill (disposal, reclamation, general operational activities): _____

 Landfill operations include the disposal of coal ash residuals, and minimizing dust potential. This includes disposing of moist ash residuals, covering the waste to reduce wind erosion, and water truck spraying of haul truck routes and active face for dust control.

2. Are any stormwater controls obstructed? _____ Yes x No

If 'Yes', describe (type of debris, reason for obstruction, etc.) _____

3. Are there indications of erosion on the landfill slopes? _____ Yes x No

If 'Yes', describe what type and its condition (rill, gully, dimensions, etc.)

4. Do conditions exist that may require additional dust controls? ☐ Yes ☒ No

If 'Yes', describe (location, appropriate dust control measures, etc.)

5. Other observations around the landfill (changes since last inspection, etc.): Fuel Handling removed solids from settling tank
and placed in lined cell. Lined cell now has waste over 60-70% of protective cover.

IV. Repairs, Maintenance, Action Items

1. Has any routine maintenance been conducted since the last inspection? ☐ Yes ☒ No

If 'Yes', describe.

2. Have any repairs been made since the last inspection? ☐ Yes ☒ No

If 'Yes', describe.

3. Are there any areas of potential concern? ☒ Yes ☐ No

If 'Yes', describe. Rodents are burrowing in protective cover. Exploring mitigation.

4. Has this inspection identified any need for repair or maintenance? x Yes No

If 'Yes', describe and state the urgency of maintenance. "Urgent" for maintenance that should be conducted as soon as possible, "Moderate" for maintenance that should be conducted within three months, and "Not Urgent" for maintenance that can be conducted in a year.

Looking at wildlife management for rodent burrowing


V. Photographs


Photographs can be taken of notable features. List of photographs:

	Location	Direction of Photo	Description
i.			
ii.			
iii.			
iv.			
v.			
vi.			
vii.			
viii.			
ix.			
x.			


Attachment 8 Photographic Log of Inspection


PHOTOGRAPHIC LOG

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 1	Date: 12/10/25		
Direction Photo Taken: South			
Description: <u>Location:</u> Southeast corner of Cell 2A (East). 16-inch concrete stormwater drainage culvert.			


Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 2	Date: 12/10/25		
Direction Photo Taken: Southwest			
Description: <u>Location:</u> Southern corner of completed Cell 2. steel stormwater drainage culvert.			


PHOTOGRAPHIC LOG

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 3	Date: 12/10/25		
Direction Photo Taken: East			
Description: <u>Location:</u> Eastern side of Cell 2A (West). Approximately 2 feet deep, square shaped depression in the vegetation cover.			

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 4	Date: 12/10/25		
Direction Photo Taken: West			
Description: <u>Location:</u> Western side of Completed Cell 1 (West). Sparse vegetation growth. Apparent reseeding took place.			


PHOTOGRAPHIC LOG

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 5	Date: 12/10/25		
Direction Photo Taken: Southeast			
Description: <u>Location:</u> Top of completed Cell 1 (West). Sparse vegetation in section running east/west across top of cell 1.			

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 6	Date: 12/10/25		
Direction Photo Taken: Northwest			
Description: <u>Location:</u> Roadway between Cell 2A and completed Cell 1 (West) running towards cell 2B. No protective cover or gravel, placed directly on ash.			


PHOTOGRAPHIC LOG

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 7	Date: 12/10/25		
Direction Photo Taken: Southeast			
Description: <u>Location:</u> Roadway between Cell 2A and completed Cell 1 (West). Tracks from haul trucks within the corner of the vegetation. Ash at surface.			

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 8	Date: 12/10/25		
Direction Photo Taken: North			
Description: <u>Location:</u> Roadway between Cell 2A and completed Cell 1 (West). Ash at surface form haul trucks.			


PHOTOGRAPHIC LOG

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 9	Date: 12/10/25		
Direction Photo Taken: Northwest			
Description: <u>Location:</u> Roadway between Cell 2A and completed Cell 1 (West). Ash at surface from Haul trucks.			


Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 10	Date: 12/10/25		
Direction Photo Taken: South			
Description: <u>Location:</u> Northeast corner of Cell 2B. Small amount of ash outside footprint of lined cell 2B. Ash on top of protective cover of cell 1.			


PHOTOGRAPHIC LOG

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 11	Date: 12/10/25		
Direction Photo Taken: West			
Description: <u>Location:</u> Northeast corner of cell 2B. Ash placement to edge and slightly outside of lined portion of cell.			


Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 12	Date: 12/10/25		
Direction Photo Taken: East			
Description: <u>Location:</u> north end of cell 2B. Leachate collection system tanks and loadout piping.			


PHOTOGRAPHIC LOG

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 13	Date: 12/10/25		
Direction Photo Taken: South			
Description: <u>Location:</u> Western edge of Cell 2B. Ash located near the western edge of the footprint of the liner on cell 2B.			


Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 14	Date: 12/10/25		
Direction Photo Taken: Birds-eye view			
Description: <u>Location:</u> Western edge of Cell 2B. Small start to animal burrows into protective cover of cell 2B. Burrows not active.			


PHOTOGRAPHIC LOG

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 15	Date: 12/10/25		
Direction Photo Taken: South			
Description: <u>Location:</u> Western edge of Cell 2B. Ash located just outside the footprint of the liner.			

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 16	Date: 12/10/25		
Direction Photo Taken: Northeast			
Description: <u>Location:</u> North end of Completed Cell 1 (East). Good vegetative cover. Small rabbitbrush shrubs starting to grow on north end.			


PHOTOGRAPHIC LOG

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 17	Date: 12/10/25		
Direction Photo Taken: Southwest			
Description: <u>Location:</u> Eastern side of Completed Cell 1 (East). Ant hill and small rodent burrows.			

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 18	Date: 12/10/25		
Direction Photo Taken: West			
Description: <u>Location:</u> Eastern side of Completed Cell 1 (East face). Thin vegetative cover.			


PHOTOGRAPHIC LOG

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 19	Date: 12/10/25		
Direction Photo Taken: Birds-eye view			
Description: <u>Location:</u> Eastern side of Completed Cell 1 (East). Small, 1-2 inch pieces of ash at the ground surface. Sufficient cover but ash at surface from burrows.			

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 20	Date: 12/10/25		
Direction Photo Taken: Northwest			
Description: <u>Location:</u> Northern end of cell 1 near gravel pit. An ash pile outside of the limit of the landfill.			


PHOTOGRAPHIC LOG

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 21	Date: 12/10/25		
Direction Photo Taken: Southwest			
Description: <u>Location:</u> Northern portion of Completed Cell 1 (East). Thick grass and large vegetation growing alongside the roadway. Rabbitbrush starting to infiltrate area.			

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 22	Date: 12/10/25		
Direction Photo Taken: Southeast			
Description: <u>Location:</u> Northern portion of Completed Cell 1 (East). An old roadway which now is covered in bare vegetation with rabbitbrush growing nearby.			


PHOTOGRAPHIC LOG

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 23	Date: 12/10/25		
Direction Photo Taken: North			
Description: <u>Location:</u> Northern portion of Completed Cell 1 (East). A case belonging to Northern Colorado Pest and Wildlife control sits next to a large piece of vegetation. Active rodent control in place.			

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 24	Date: 12/10/25		
Direction Photo Taken: Northwest			
Description: <u>Location:</u> Northern portion of Completed Cell 1 (East). The vegetation cover is made of thick grass and larger shrubs.			


PHOTOGRAPHIC LOG

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 25	Date: 12/10/25		
Direction Photo Taken: Northwest			
Description: <u>Location:</u> Northern portion of Completed Cell 1 (East). A large area of bare vegetation running in an east/west orientation.			


Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 26	Date: 12/10/25		
Direction Photo Taken: Northwest			
Description: <u>Location:</u> Northern portion of Completed Cell 1 (East). Thick vegetation cover.			

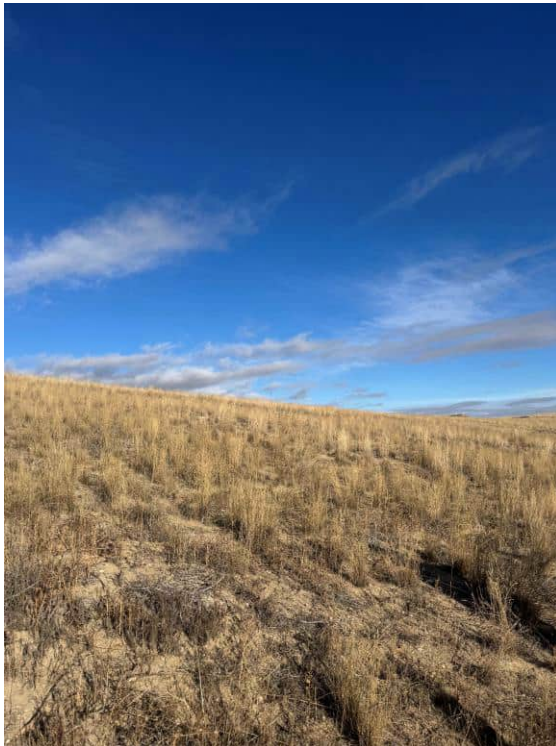
PHOTOGRAPHIC LOG

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 27	Date: 12/10/25		
Direction Photo Taken: Northwest			
Description: <u>Location:</u> Northern portion of Completed Cell 1 (East). Strong vegetation cover along the side of the cell.			


Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 28	Date: 12/10/25		
Direction Photo Taken: West			
Description: <u>Location:</u> Northern portion of Completed Cell 1 (East face). Tufts of vegetation with erosion between form the ground cover in this area.			


PHOTOGRAPHIC LOG

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 29	Date: 12/10/25		
Direction Photo Taken: Birds-eye view			
Description: <u>Location:</u> Middle of Completed Cell 1 (East). Small pieces of ash on the surface of the ground.			

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 30	Date: 12/10/25		
Direction Photo Taken: North			
Description: <u>Location:</u> Middle of Completed Cell 1 (East). Soft cover areas where small rodent activity present.			

PHOTOGRAPHIC LOG


Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 31	Date: 12/10/25		
Direction Photo Taken: East			
Description: <u>Location:</u> Middle of completed Cell 1 (West face). Active animal burrows approximately 4-6 inches in diameter. Small amounts of ash have been brought to the surface.			

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 32	Date: 12/10/25		
Direction Photo Taken: Birds-eye view			
Description: <u>Location:</u> Middle of completed Cell 1 (West). A closeup of one of the animal burrows described above.			

PHOTOGRAPHIC LOG

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 33	Date: 12/10/25		
Direction Photo Taken: Birds-eye view			
Description: <u>Location:</u> Middle of completed Cell 1 (West). The animal burrow pictured above with a foot as size reference.			

PHOTOGRAPHIC LOG

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 34	Date: 12/10/25		
Direction Photo Taken: North			
Description: <u>Location:</u> South end of cell 1. The animal burrow.			

PHOTOGRAPHIC LOG

Client Name: Platte River Power Authority		Site Location: Rawhide Station, Wellington, CO	Project No. 60775025
Photo No. 35	Date: 12/10/25		
Direction Photo Taken: North			
Description: <u>Location:</u> cell 2A stormwater culvert near monitoring well ASH-03. Partially covered stormwater outfall pipe.			