Applicant: Gunner-Reilly, Corp.
Mine Name: Cane Creek Mine
Permit Number: P-3952

Part III - Operation Plan

A. General Operation Information

1. Describe the type and method of coal mining procedures and major equipment to be used. (780.11)

See Attachment III-A-1

Major equipment to be used includes but may not be limited to:

- Backhoes
- Off Road Haulers
- Loaders
- Drills
- Service Trucks
- Dozers
- Track Backhoes
- Bulk Anfo Trucks

2. Describe the sequence and timing of increments to be mined (as shown on permit map) over the total life of the permit. (780.11)

The timing increments are as follows:

Increment No.	Acres	From	Estimate Life
1	77	Issuance of Permit	12 Months
2	37	End of Increment #1	12 Months
3	40	End of Increment #2	12 Months
4	21	Issuance of Permit	End of Permit

The sequence of mining operations will be generally as follows:

1) Construction of Sediment Control Structures
2) Clearing and Grubbing
3) Topsoil Removal (if required)
4) Overburden Drilling and Blasting
5) Overburden Removal
6) Coal Recovery
7) Re-Grading
8) Revegetation

Applicant: Gunner-Reilly, Corp.
Mine Name: Cane Creek Mine
Permit Number: P-3952

ATTACHMENT III-A-1
TYPE AND METHOD OF COAL MINING PROCEDURES

The area method of surface mining will be used. Preparation will consist of (a) timber removal (b) topsoil removal (if required) (c) drilling and blasting of overburden (d) overburden removal (e) coal removal (f) regrading and revegetation. Once the site has been regraded and topsoiled (if required) soil samples will be analyzed (where required) and proper nutrients will be added before revegetation. Any problem that may arise will be handled by proper consulting personnel utilizing various support equipment and support personnel. The New Castle and Mary Lee Coal Seams will be mined as mining progresses along the length of each cut. These seams will be mined simultaneously after the New Castle seam mining progresses up the cut a sufficient distance for drilling, shooting, and overburden removal to begin on the Mary Lee Seam. Drilling and shooting on the New Castle Seam will begin on the next cut prior to completion of operations on the Mary Lee seam in the current cut. Mining will continue in this manner until the limits of each increment are reached.

Mining at the Cane Creek Mine will commence with Increment No. 1 located within the SE/SE of Section 6. Pits will align north to south with advancement to the west. Cut no. 1 will be a box cut with the southern end of the cut taken at the existing highwall north of Basin 010E. Spoil material from cut no. 1 and cut no. 2 will be temporarily spoiled in the open cut of the previously mined area in the vicinity of cross-sections 3-4 thru 11-12 as shown on Attachment III-A-1, Cross-Section Location Map. This temporary spoil placement will be graded to the approximate original contour as mining progresses. Approximately 571000 cubic yards are contained in cuts no. 1 & 2. There is space available to place approximately 790000 cubic yards in this area. See Attachment III-A-1, Cross-Section Drawing 1 of 3. Spoil material from cut no. 3 will be placed in the open pit from cut no. 2. Spoil material from the next cuts will be placed in subsequent open pits created from previous cuts. Mining will continue in this manner through cut no. 15.

The mining direction will change beginning with cut no. 16 located within the SE/SE of Section 6. Cuts will align north to south with advancement to the east. Spoil material from cut no. 16 will be placed in the open pit from cut no. 1. Spoil material from the next cuts will be placed in subsequent open pits created from previous cuts. Mining will continue in this manner until the limits of Increment No. 1 are reached.

A delay in contemporaneous reclamation will be requested from the Director for the open highwall from the mining of cut no. 1 until the commencement of cut no. 16.

Basin 010E (existing basin permitted under P-3742) was constructed and certified to the Regulatory Authority on June 25, 2001. Basin

011P will be constructed and certified to the Regulatory Authority when mining operations progress 300 feet to the northeast of Basin 011P. Due to basin 011P being constructed in spoil material, the interior of the basin will be lined with 1.0 feet (minimum) of clay material with a permeability no greater than 1 X 10^{-6} cm/sec up to the emergency spillway elevation to minimize infiltration and to provide a stable pool level. The material will be placed in horizontal lifts not to exceed 6 inches and compacted to 95% of the standard proctor.

Mining of Increment No. 2 will commence at the eastern most point of the existing highwall located within the SW/SW of Section 31 and NW/NW of Section 6. Pits will generally align northeast to southwest with advancement to the west. Spoil material from cut no. 1 and cut no. 2 will be placed within the existing open pit and the previously mined area in the vicinity of cross-sections 13-14 & 15-16 as shown on Attachment III-A-1, Cross-Section Location Map. Approximately 250000 cubic yards of contained in cuts no. 1 & 2. There is space available to place approximately 312000 cubic yards of spoil material in this area. See Attachment III-A-1, Cross-Sections Drawing 2 of 3. Spoil material from the next cuts will be placed in subsequent open pits created from previous cuts. Beginning with cut no. 17 the pits will begin to generally align east to west with advancement to the south. Mining will continue in this manner until the limits of the increment are reached.

Mining of Increment No. 3 will be a continuation of the mining operations of Increment No. 2. Mining will commence at the eastern most point of the increment at the final highwall of Increment No. 2. Pits will generally align northeast to southwest with advancement to the west. Spoil material from cut no. 1 and cut no. 2 will be placed within final open pit of Increment No. 2 and placed on the previously mined area northwest in the vicinity of cross-sections 17-18 and 19-20 as shown on Attachment III-A-1, Cross-Section Location Map. Approximately 242000 cubic yards of material are contained within cuts no. 1 & 2. There is space available to place approximately 252000 cubic yards in this area. See Attachment III-A-1, Cross-Sections Drawing 3 of 3. Spoil material from the next cuts will be placed in subsequent open pits created from previous cuts. Pits will generally run in a north to south direction with advancement to the west. Mining will continue in this manner until the limits of the increment are reached.

Basin 002P will be constructed and certified prior to the Regulatory Authority prior to disturbance within the watershed of Basin 002P. The diversions in Increments No. 2 & No. 3 will be constructed after mining begins and as needed when grading and reclamation require the drainage control to be accomplished using these diversions. Currently all rainfall runoff from Increments No. 2 & No. 3 flow to the proposed Basin 002P location.

See Attachment III.-A.-1, Operation Map, for the cut sequence layout.

Applicant: Gunner-Reilly, Corp.
Mine Name: Cane Creek Mine
Permit Number: P-3952

See Attachment III.-A.-1, Cross-sections Drawings.

See Attachment III.-A.-1, Cross-section Location Map.

3. Attach a narrative explaining the construction modification, use, maintenance, and removal of the following facilities: (780.11)

   (a) Coal removal, handling, storage, cleaning and transportation structures and facilities;
   (b) Spoil, coal processing waste and non-coal waste removal, handling, storage, transportation and disposal structures and facilities;
   (c) Mine facilities; and
   (d) Water pollution control facilities.

   See Attachment III-A.-3.

4. Describe the means to be used to maximize the use and conservation coal reserves in the permit area. (780.18, 816.59)
   Some of the measures are:

   A) Mining the deepest seam that is economically feasible to mine.
   B) Rehandling overburden in order to maximize coal recovery that would normally be lost in the toe of the spoil.
   C) Processing and blending coal that in its "raw" condition would not have a market.

5. Describe measures to be taken to ensure that all debris, acid-forming and toxic-forming materials and materials constituting a fire hazard are disposed of in accordance with 816.89 and 816.103; include contingency plans to prevent sustained combustion of such material. (780.18)

   All acid-forming, toxic-forming, and combustible materials will be disposed of by selectively placing these materials within the mine excavations. These disposal locations will be a minimum of 10 feet vertically above the pit floor of the lowest seam to be mined and 4 feet below the final reclaimed surface of the mined area. None of this material will be placed within 100 feet of a drainage course or 30 feet of a final mining highwall.

   After placement, these materials will be covered with a minimum of 4 feet of the best available non-acid and non-toxic forming, and non-combustible material. The surface of this cover will be crowned or sloped to prevent infiltration of surface water into the disposed material.

   All non-coal waste and debris which may be accumulated at the site (including paper and wood shipping containers, empty oil containers, worn out machine parts, etc.) will be confined in appropriate temporary containers or storage areas and periodically transported to an offsite, ADEM approved, disposal area which meets all Federal, State and local laws and ordinances for permanent disposal of such materials.

Attachment III-A-3

3.a) Crushing and screening of the coal to be mined will be performed utilizing a portable plant transported to the site by truck and erected on site. Regular maintenance will consist of routine lubrication, oil checking and changing as necessary, etc. and will be conducted during the period the crusher and/or screen is in use. Routine maintenance will be required to assure that the road continually meets performance standards and will consist of periodic grading, resurfacing, dust suppression and maintenance of sediment control facilities. Dust suppression will consist of the application of water, chemical binders and/or other dust suppressants. No oil will be utilized in this process. When no longer needed the plant will be disassembled and transported offsite by trucks.

All haulage roads shall be designed to the following minimum criteria and/or prudent engineering practice for the design of haulroads, except where said haulroad is a public highway. See Part III-B-5 for primary and ancillary roads detailed design plans.

To the extent possible roads will be located on ridges or on the most stable available slopes to minimize erosion, downstream sedimentation and flooding in an effort to prevent adverse effects to fish, wildlife and related environmental values.

Prior to construction, the roadway areas shall be cleared, grubbed, and all topsoil shall be removed and stockpiled. Vegetation will not be cleared for more than the width necessary for the road and associated ditch construction.

Roads will be constructed by placing and compacting lifts of suitable subgrade material to a grade suitable for the intended use of the road. Drainage pipes will be placed in embankments or cuts as necessary to assure proper drainage. Once the desired grade of subgrade material has been attained and all drainage structures installed roads will be surfaced with available gravel, rock, chert or other suitable material as approved by the state regulatory agency sufficiently durable for the anticipated volume of traffic weight and speed of vehicles to be used. The surface will be compacted until a desirable grade and surface is attained. No toxic or acid forming substances will be used in this surface material. No sustained grade will exceed 10 percent unless deemed necessary, in which case appropriate sediment control facilities will be constructed. If grades of greater than 15 percent are required cross-over drains, ditch relief drains and road drainways will be located at a minimum of 300 foot intervals.

All roads will be constructed and maintained so as to have adequate drainage, using ditches, cross drains, and ditch relief drains. Drainage pipes will be placed in embankments or cuts as necessary

to assure proper drainage and hay bale check dams and silt fences will be used at strategic locations when necessary to control sediment runoff. Natural drainage ways will not be altered unless otherwise approved by the ASMC. For stability the side slopes of the road embankments and/or cuts will be seeded with temporary and perennial type grasses and mulched to aid in preventing erosion and to enhance germination of the seed. No modifications are expected and only routine maintenance will be required to maintain the surface of roads such as periodic grading and resurfacing. Spot seeded and mulching will take place as necessary to improve coverage of vegetation on side slopes and embankments. Haulroads will be maintained with water and/or other materials to minimize fugitive dust emissions. Maintenance of erosion control facilities will include periodic removal of sediment from structures and repairs of areas damaged due to weather, etc. Unless retention of the roads is approved for post-mining land use the following procedures will apply. When no longer needed the roadbeds will be ripped, plowed and scarified. All road surfacing materials will be removed and placed within an open pit within the permit area. The natural drainage patterns will be restored by cutting slopes and shaping to blend with the natural drainage of surrounding areas. If necessary cross drains, dikes and water bars will be constructed to minimize erosion. Terraces will be used as necessary to provide long term stability on cut and fill slopes and to minimize erosion. Road surfaces will then be revegetated according to the reclamation plan approved for this permit application, which includes planting a mixture of up to 100 lbs. or more of various legumes and grasses.

Coal stockpiles will be located within the permitted and bonded area such that drainage from the area will be routed through one or more of the sediment basins that are to be constructed. In general an area will be graded to a relatively level state. Upon completion of the subgrade, a relatively impervious pad or liner will be constructed to a minimum thickness of 12 inches. The pad or liner will be made of a clayey material possessing a maximum permeability coefficient of 1×10^{-6} centimeters per second. The material will be placed in 6 inch compacted lifts to 95 percent of the standard proctor density. A pad will be constructed of coal material over the relatively impervious pad or liner with material created by cleaning the coal in the pit. The only modification to the stockpile areas may be to enlarge them and this operation, if necessary, will be handled in the same manner as new construction. Small terraces and/or temporary diversions will be used as necessary to minimize surface runoff across the stockpile areas. These facilities will be maintained periodically along with the coal pad which will be maintained by grading and reshaping as necessary. Routine maintenance will be required to assure that the road continually meets performance standards and will consist of periodic grading, resurfacing, dust suppression and maintenance of sediment control facilities. Dust suppression will consist of the application of water, chemical binders and/or other dust suppressants. No oil will be utilized in this process. After the

stockpile area has served its useful purpose the pad material that can not meet market specifications will be buried within the permit area no closer than 30 feet from any remaining highwalls and 100 feet from any drainage courses and a minimum of 10 feet above the bottom of the lowest coal seam being mined and will be placed under a minimum of four feet of the best available non-acid and non-toxic forming and non-combustible material.

b) There is adequate spoil room available on site and excess spoil disposal facilities are not necessary. There will be no coal processing which generates waste so no coal waste disposal facilities are necessary. Any non-coal wastes will be disposed of within an offsite disposal area which meets all Federal, State and local laws and ordinances for permanent disposal of such materials.

c) There will be no mine facilities at this site other than a portable office which will most probably be an office trailer or a converted mobile home and will be removed from the site soon after the end of the mining process. There is a possibility that during the life of the permit an equipment maintenance shop may be constructed at this site. If this decision is made the building will be located within the permitted and bonded area. Generally these buildings are constructed of sheet metal covering a wooden frame built around poles and are erected in a manner that will facilitate disassembly and relocation to another site after equipment is removed from the area. Any modification or addition to the structure would be of similar construction. Periodic maintenance including painting and winterizing will be done either by contractors or mine personnel. After mining is completed and the equipment is removed from the site, the building will be disassembled and the various structural components will be transported via truck to another location.

d) Water pollution control facilities, sediment basins, berms, and drainage ditches shall be constructed prior to mine operation in a particular increment according to approved plans. These facilities will be used to control runoff from the mine and will be inspected and maintained until reclamation of the area is complete. Sediment basin construction and any subsequent modifications that may be required will be conducted under the general supervision of a qualified registered professional engineer and will be done in accordance with the approved design plans. The dam will be constructed of the best available soil material based on soil strength parameters and permeability. The dam core wall will bear on unyielding, relatively impermeable consolidated rock and the balance of the dam structure on the prepared compacted natural soil material present at the site. The dam will be built in horizontal lifts beginning at the lowest point of the foundation with each lift being thoroughly compacted. The drainage structure will be installed as outlined on the detailed design plans and shall be stabilized with respect to erosion using riprap, concrete paving, energy dissipaters, vegetation or otherwise. After construction of

the basin, the dam and all areas disturbed by construction will be limed, fertilized, and seeded with an appropriate mixture of grasses and legumes, then mulched.

Routine maintenance of the sediment basins will consist of spot seeding, fertilization and mulching to insure that a good vegetative cover is maintained on the dam and areas around the pond, repair and stabilization of any rills and gullies which may develop, repairs to discharge structures and erosion protection structures as required, and removal of entrapped sediment from the basins prior to its reaching the maximum level indicated on the approved plans. All sediment basins will be inspected quarterly by the operator's personnel and annually by a registered professional engineer and any required maintenance will be completed at the earliest possible time by the operator.

Basin 010E was permitted under Beaird Mining & Minerals Co., Inc.'s Cane Creek Mine, P-3742, to utilize and control drainage from disturbed areas within Increment No. 1 of the Cane Creek Mine. Basin 010E was constructed and certified to the Regulatory Authority on June 25, 2001. Basin 011P will be constructed and certified to the Regulatory Authority when mining operations progress 300 feet to the northeast of Basin 011P.

The remaining basins are proposed, no modification plans are required. If during the term of the permit basins require modifications, modification plans will be submitted to the Regulatory Authority for approval prior to any modifications. Upon modifying the basin, the basin will be certified to the Regulatory Authority.

Upon completion of mining, successful reclamation and effluent standards being met, each sediment basin not remaining as a permanent water impoundment will be dewatered in an environmentally safe manner (such as siphoning, pumping, etc.) and reclaimed to approximate original contours by the following procedure:

A temporary diversion channel (designed for a 10 yr. -24 hr. precipitation event) shall be cut along the outer edge of the basin to re-route drainage around the basin and back through the stabilized spillway to allow for the reclamation of the sediment basin. The diversion channel shall be designed and grassed as per enclosed information. (See permanent diversion channel for basin disposal) Upon completion of the diversion channel the embankment will be breached to the existing sediment level to prevent the impoundment of water. The breach will be graded to a minimum side slope of 2.5 to 1 and revegetated and/or riprapped as to prevent erosion and ensure the stability of the exposed breach. The remaining back slope of the embankment will be graded to a minimum 3 to 1 slope. The dewatered sediment basin will be seeded with some combination of the following: Fescue, bermuda, rye grass, canary grass, and willows. After seeding the area will be mulched. Any

additional sediment or embankment material not used to meet approximate original contour, if nontoxic, will be spread in thin layers within the permit area and vegetated as stated in the reclamation plan. All toxic material encountered in the basin disposal will be buried and covered with 4 feet of nontoxic and noncombustible material and vegetated a stated in the reclamation plan.

6. Give a description, including appropriate cross-sections and maps, of measures to be used to seal or manage mine openings, bore holes, wells and other openings within the proposed permit area. (780.18, 816.13-816.15)

Bore holes, wells, and other openings will be backfilled with cuttings from the holes and capped with clay or other impervious material. Abandoned monitoring wells will be sealed with a concrete cap which is approximately 2'x 2'x 0.5'. See Attachment III-A-6 for typical illustration of methods to be used to seal and/or manage bore holes and wells.

7. Give a description of steps to be taken to comply with applicable water quality laws, regulations and health and safety standards. (780.18)

Surface runoff will be routed through sediment control basins prior to being discharged from the permit area. Discharges from sediment basins will be monitored by in-house personnel or consultants, at the discretion of the permittee, as necessary to assure compliance with applicable State and Federal Laws and Regulations. Chemical treatment with aqueous sodium hydroxide solution will be used on water entering the drainage course of the existing basins if this is determined necessary to achieve compliance with State and Federal Laws. On occasion, a solution of chemically hydrated lime and water will be used in sediment basins for immediate correction of pH imbalances. With proper pH, the heavy metals will precipitate to the bottom of the basins and will not exit the discharge pipe or spillway. Alum may be used on occasion if necessary to facilitate flocculation and precipitation of suspended solids. A permit to discharge under the National Pollutant Discharge Elimination System has been applied for and discharges from the proposed basins will be monitored and results of that monitoring, both compliant and non-compliant, will be reported in accordance with the NPDES Permit and the hydrologic monitoring plan shown elsewhere in this permit application. A trained and qualified health and safety staff will be contracted to assure that all health and safety standards and MSHA regulations are complied with. Certification and training of all mine personnel will be current and will be updated as necessary by attending MSHA classes taught by certified personnel. All dust, noise and other required control tests will be current and will be performed as necessary by certified MSHA personnel. Records of all testing required will be kept at the mine and will be available for inspection by the Regulatory Authority. All necessary permits for field absorption systems for the office and similar facilities will be obtained prior to construction of these facilities. Haul roads will be maintained with water and/or other materials to minimize fugitive dust emissions.

8. Is surface mining to be conducted within 500 feet of an underground mine? (780.27, 816.79) (XXX) Yes ( ) No

If yes, describe measures to be used to comply with Section 816.79. Attach a map showing the location and extent of known workings in accordance with 780.14(a)(13). Attach a copy of MSHA approval.

As shown on the permit map, the permit area is adjacent to the abandoned works of an unknown named underground mine in the Mary Lee Coal Seam. By allowing the mining of coal adjacent to the abandoned underground mines, coal reserves will be recovered that would otherwise be lost, the potential of water pollution caused by the underground workings will be eliminated, and public safety hazards from subsidence and entrapment within the mine openings will be eliminated.

In numerous previous permit applications submitted to ASMC, the Mine Safety and Health Administration (MSHA) has been consulted concerning conducting surface mining within 500 feet of an abandoned or inactive underground mine. MSHA's response has always been, if the underground mine is abandoned or inactive with no works in the mine, MSHA has no interest, concern, or jurisdiction.

B. Engineering Plans

All cross-sections, maps and plans related to operations, reclamation and structures must comply with Section 780.10. Plans, appropriate calculations and conclusions shall be presented in a clear and logical sequence and shall take into account all applicable factors necessary to evaluate the proposed plan or design.

1. Existing Structures. (780.12, 786.21)

(a) Describe each existing structure to be used, its location, current condition, approximate dates of construction and evidence (including relevant monitoring data) showing whether or not the structure meets the performance standards of Subchapter K or Subchapter B, whichever is more stringent and demonstrate whether or not the use of existing structures will pose a significant harm to the environment or public health or safety.

None.

(b) If an existing structure requires modification or reconstruction to meet the performance standards, attach a compliance plan which includes design specifications, construction schedule, monitoring procedures, and evidence that the risk of harm to the environment or public health or safety is not significant during modification or reconstruction.

None.

2. Ponds, impoundments, banks, dams and embankments. (780.25)

(a) Submit a general plan which complies with Section 780.25(a)(1) for each proposed sedimentation pond, water impoundment, and coal processing waste bank, dam or embankment to be located within the proposed permit area.

See attachment III-B.-2.A

(b) Submit detailed design plans which comply with Sections 780.25(a)(2 and 3) and 816.46 for each sedimentation pond to be constructed on the increment you currently propose to mine. If the sediment pond is to remain as a permanent water impoundment, design plans shall also comply with Section 816.49.

See attachment III-B.-2.A

(c) Submit detailed design plans which comply with Sections 780.25(a)(2 and 3) and 816.49 for each temporary or permanent water impoundment to be constructed on the increment you currently propose to mine.

See attachment III-B.-2.A

(d) Submit detailed design plans which comply with Sections 780.25(a) (2 and 3) and 816.81-816.85 for each coal processing waste bank to be constructed on the increment you currently propose to mine.

None proposed.

(e) Submit detailed design plans which comply with Sections 780.25(a)(2 and 3) and 816.91-816.93 for each coal processing waste dam and embankment to be constructed on the increment which you currently propose to mine.

None proposed.

3. Diversions. (780.29,816.43, 816.44)

Are diversions of overland flow or stream channel diversions proposed?
(XXX) Yes ( ) No

If yes, complete the following:

(a) Is the diversion to be permanent?
(XXX) Yes ( ) No

Applicant: Gunner-Reilly, Corp.
Mine Name: Cane Creek Mine
Permit Number: P-

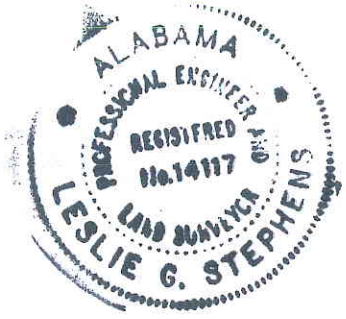
CERTIFICATION STATEMENT:

I hereby certify that Attachment III-B.-2.A prepared for Gunner-Reilly Corp.'s Cane Creek Mine, is in accordance with the Regulations of the Alabama Surface Mining Commission as adopted by Act 81-435 of December 18, 1981 and amended to date, and are true and correct to the best of my knowledge and belief.

Leslie G. Stephens

Leslie G. Stephens, P.E., P.L.S.
AL Registration #14117-E

09/28/2010
Date



Applicant: Gunner-Reilly, Corp.
Mine Name: Cane Creek Mine
Permit Number: P-3952

GENERAL PLAN

The general plan consists of constructing two (2) proposed sediment basins, basins 002P and 011P for the life the mine. And utilizing one (1) existing sediment basin, Basin 010E which was constructed and certified under ASMC permit P-3742. The diversions in Increments No. 2 & No. 3 will be constructed after mining begins and as needed when grading and reclamation require the drainage control to be accomplished using these diversions. Currently all rainfall runoff from Increments No. 2 & No. 3 flow to the proposed Basin 002P location. In addition, Basins 002P, 010E and 011P were permitted under Beaird Mining & Mineral Co., Inc.'s Cane Creek Mine, P-3742, and will also be bonded and permitted under this Cane Creek permit to utilize and control drainage from disturbed areas within Increment No. 1, No. 2, and No. 3. General design data is enclosed. Basins 010E and 011P were designed and submitted under the Beaird Mining: Cane Creek Mine P-3742, Revision R-4 as a part of the revision application. Basin 010E and 011P Detailed Design Plans were approved on February 1, 2001 and there are no plans to modify them in this permit application. See attached Detailed Design Plans for Basins 010E and 011P along with a construction certification of Basin 010E. These previously approved design plans will be utilized for this permit. Basin 010E was constructed and certified to the Regulatory Authority on June 25, 2001. Basin 011P has not been constructed as of this time. Due to basin 011P being constructed in spoil material, the interior of the basin will be lined with 1.0 feet (minimum) of clay material with a permeability no greater than 1 X 10^{-6} cm/sec up to the emergency spillway elevation to minimize infiltration and to provide a stable pool level. The material will be placed in horizontal lifts not to exceed 6 inches and compacted to 95% of the standard proctor. All basins are to remain as permanent water impoundments, fish and wildlife habitat. Data to qualify the basins as permanent water impoundments will be submitted to the regulatory authority prior to Phase II Bond Release. (See attached data and watershed map for basin location and preliminary hydrologic information).

Geologic investigations of the area indicate layers of sandstone, siltstone, shale and minor amounts of bituminous coal and underclay. The coal to be mined by Gunner-Reilly Corp., will be confined to the New Castle and Mary Lee Coal Seams. The strata in the area is characterized by small scale normal faulting and gentle open folding

All surface drainage from the proposed mining area flows into Bullbarn Creek, Little Frog Ague Creek and Cane Creek.

All diversions are to be temporary and will be re-graded and revegetated. (See diversion ditch criteria).

As shown on the permit map, abandoned underground mines are known to exist within 500' of the permit boundary. No underground mines

exist beneath Basins 002, 010, or 011, therefore no effect on these basins will result from subsidence of the subsurface strata is anticipated.

Applicant: Gunner-Reilly, Corp.
Mine Name: Cane Creek Mine
Permit Number: P-3952

Attachment III-B-2-A

Basin No.	Location	Drainage Area (Acres)
002P	SW/SE, SE/SW Sec. 36, T.14 S., R. 7 W., and the NW/NE Sec. 1, T.15 S., R.7 W.	192.0
010E	SE/SE Sec. 6 & NE/NE , Sec. 7, T.15S., R.6 W.	102.0
011P	NW/NE Sec. 7 T.15S., R.6 W.	98.0

All located within Walker County, Alabama; as found on the Cordova USGS Quadrangle Map.

PERC
ENGINEERING CO., INC.

Telephone: (205) 384-5553
Facsimile: (205) 295-3114 - Main Building
(205) 295-3115 - Water Lab
Web Address: www.percengco.com

June 25, 2001

Mr. Gary Heaton, P.E.
Alabama Surface Mining Commission
Post Office Box 2390
Jasper, Alabama 35502-2390

P-3952
ATTACHMENT III - B - 2A

RE: Beaird Mining & Minerals, Inc.
Cane Creek Mine
P-3742

Dear Gary:

I hereby certify that Basin 010 located in the SE 1/4 of SE 1/4 of Section 6 and the NE 1/4 of NE 1/4 of Section 7, Township 15 South, Range 6 West, Walker County, Alabama, for the above referenced mine was constructed in accordance with the approved ASMC design plans to the minimum design specifications, as per field inspection.

If you have any questions or require additional information please feel free to call.

Sincerely,
PERC Engineering Co., Inc.

ALABAMA REGISTERED NO. 18213 PROFESSIONAL ENGINEER STEVEN R. INGLE

Steven R. Ingle, P.E.
AL Reg. No. 18213

P.O. Box 1712 • Jasper, Alabama 35502 • 1606 Highway 78 West • Jasper, Alabama 35501

Alabama Department of Environmental Management

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM INDIVIDUAL PERMIT

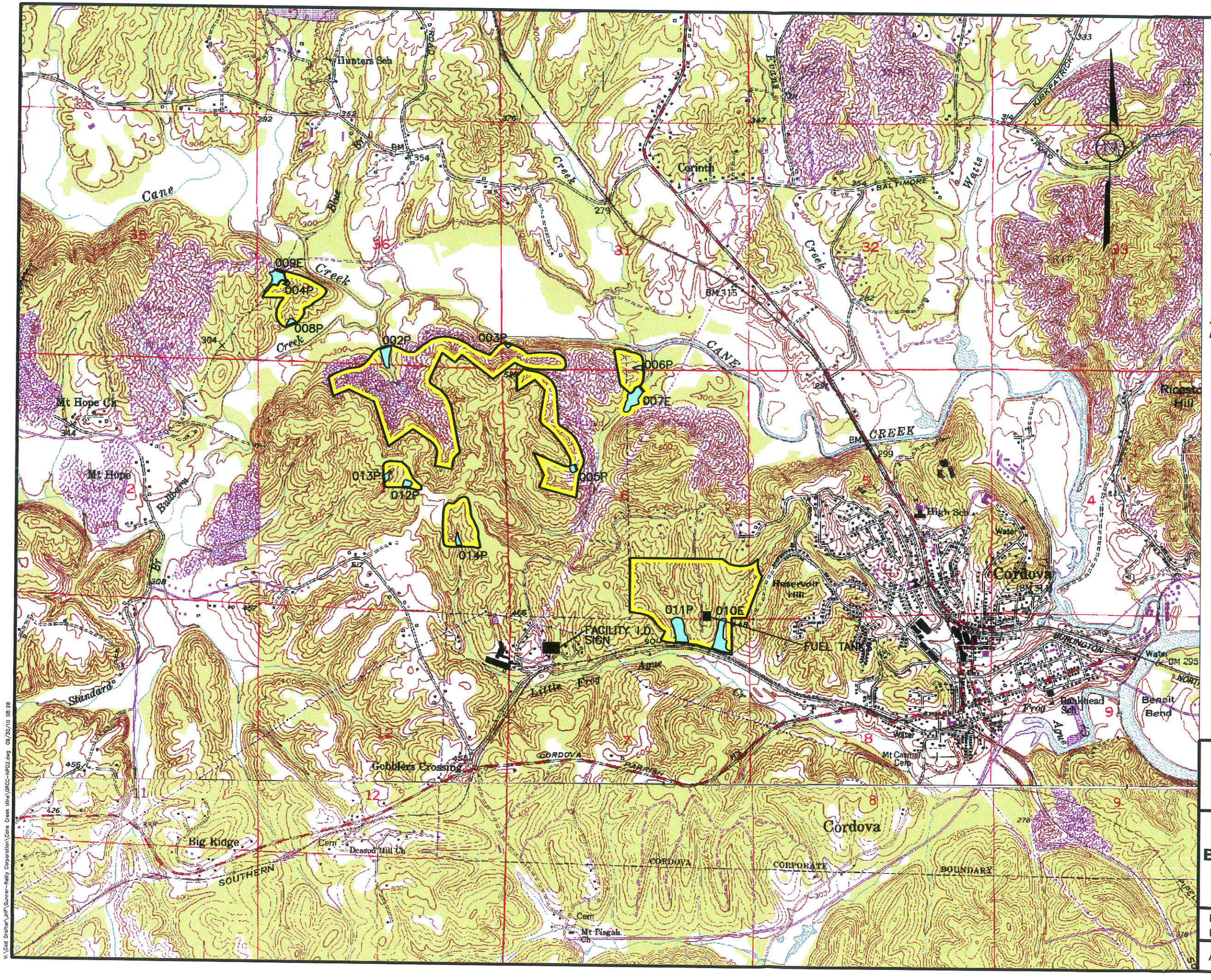
PERMITTEE:	Beaird Mining & Minerals Co., Inc. Cane Creek Mine
FACILITY LOCATION:	Walker County T14S, R6W, S31 T15S, R7W, S1 T15S, R6W, S5,6,7 T14S, R7W, S36
PERMIT NUMBER:	AL0048348

POINT SOURCE NUMBER(S)	RECEIVING WATER(S)
002	unnamed tributary to Bullbarn Creek
003, 004, 009	Cane Creek
005, 006, 007	unnamed tributary to Cane Creek
008	Bullbarn Creek
010	unnamed tributary to Little Frog Ague Creek
011, 014	Little Frog Ague Creek
012, 013	unnamed tributary to Standard Branch

In accordance with and subject to the provisions of the Federal Water Pollution Control Act, as amended, 33 U.S.C. §§1251-1378 (the "FWPCA"), the Alabama Water Pollution Control Act, as amended, Code of Alabama 1975, §§ 22-22-1 to 22-22-14 (the "AWPCA"), the Alabama Environmental Management Act, as amended, Code of Alabama 1975, §§22-22A-1 to 22-22A-16, and rules and regulations adopted thereunder, and subject further to the terms and conditions set forth in this permit, the Permittee is hereby authorized to discharge into the above-named receiving waters.

ISSUANCE DATE:	6/22/2007
EFFECTIVE DATE:	6/22/2007
EXPIRATION DATE:	5/31/2012

Alabama Department of Environmental Management



LEGEND

PERMIT AREA

SURFACE CONTOUR (20' INTERVAL)

SEDIMENT BASIN

SECTION 36, TOWNSHIP 14 SOUTH, RANGE 7 WEST,
SECTION 31, TOWNSHIP 14 SOUTH, RANGE 6 WEST,
SECTION 1, TOWNSHIP 15 SOUTH, RANGE 7 WEST,
SECTION 5, 6, & 7, TOWNSHIP 15 SOUTH,
RANGE 6 WEST,

NPDES Permit No. AL0048348
Issuance Date: 6/22/07
Effective Date: 6/22/07
Expiration Date: 5/31/12
Transfer Date: Pending

PERC ENGINEERING CO., INC.

NPDES PERMIT & VICINITY MAP
BEAIRD MINING & MINERALS CO., INC.
CANE CREEK MINE

DRAWN BY: G.R. DWG. NAME: GRCC-NPD2	DATE: 9-30-10
APPROVED BY: J.H.F	SCALE: 1" = 2000'

H:\Coal Drafter_UPT\Gunner-Reilly Corporation\Cane Creek Mine\GRCC-NPD2.dwg 09/30/10 08:28

AGREEMENT

This agreement is entered into this date by Beaird Mining& Minerals Co., Inc. and Gunner-Reilly Corp. in order to effect a transfer of Alabama Department of Environmental Management NPDES Permit No. AL0048348 and the responsibility, coverage, and liability thereunder from Beaird Mining& Minerals Co., Inc. to Gunner-Reilly Corp. .

On the date such transfer becomes effective, Gunner-Reilly Corp. , agrees to assume the responsibility, coverage, and liability of NPDES Permit No. AL0048348 and Beaird Mining& Minerals Co., Inc., agrees to relinquish all rights which it may have under said permit.

This agreement is entered into by parties this 31 day of August, 2010 Said transfer is to become effective on the effective date that ADEM approves this transfer.

Beaird Mining& Minerals Co., Inc.

Witness

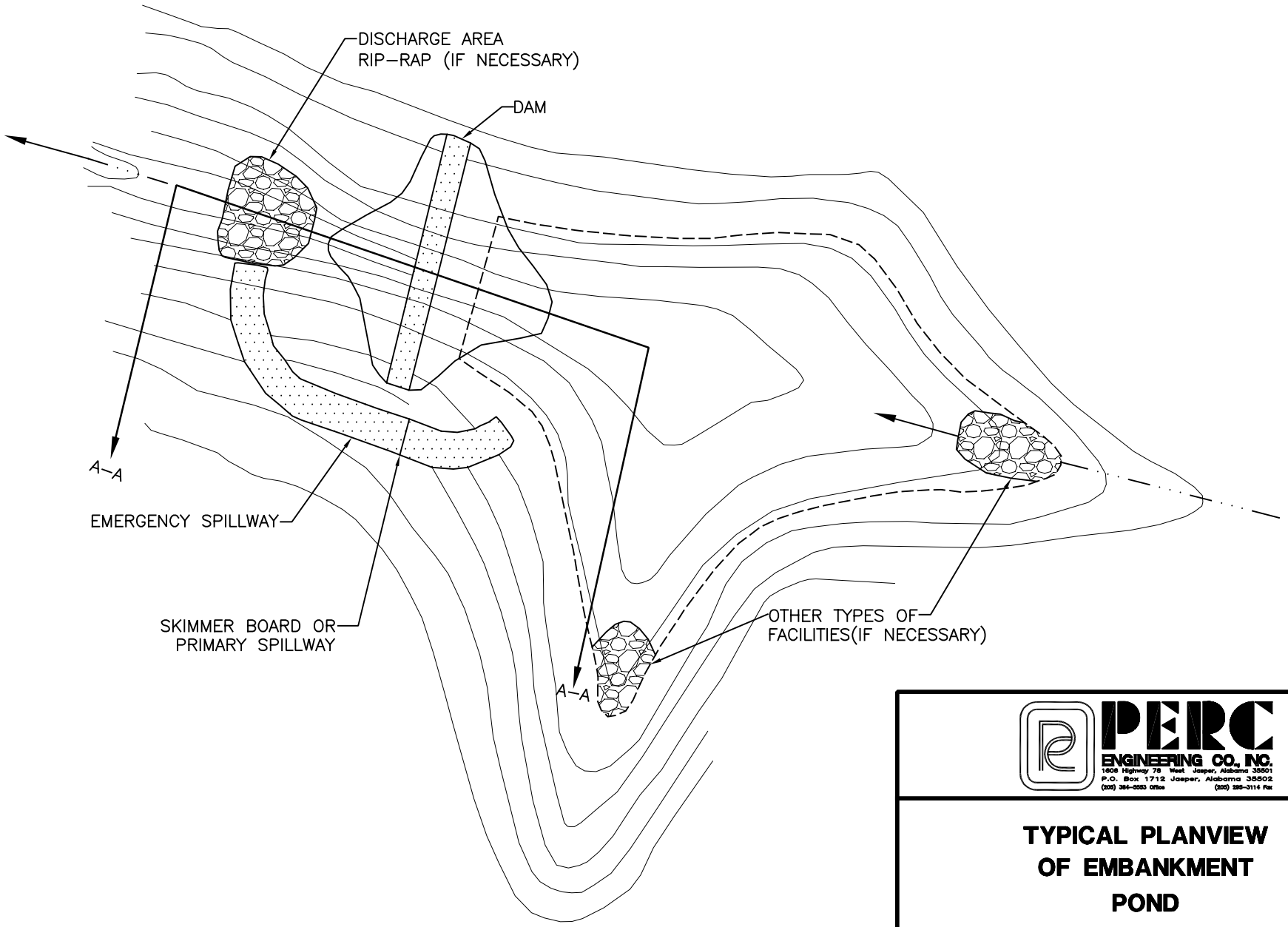
BY: Gail Beaird
Gail Beaird, President

Gunner-Reilly Corp.

Witness

BY:
Jeffery D. Elkins, President/CEO

C:\PTO\WKM\TYPICALS.dwg 08/10/05 09:06



PLANVIEW OF EMBANKMENT POND

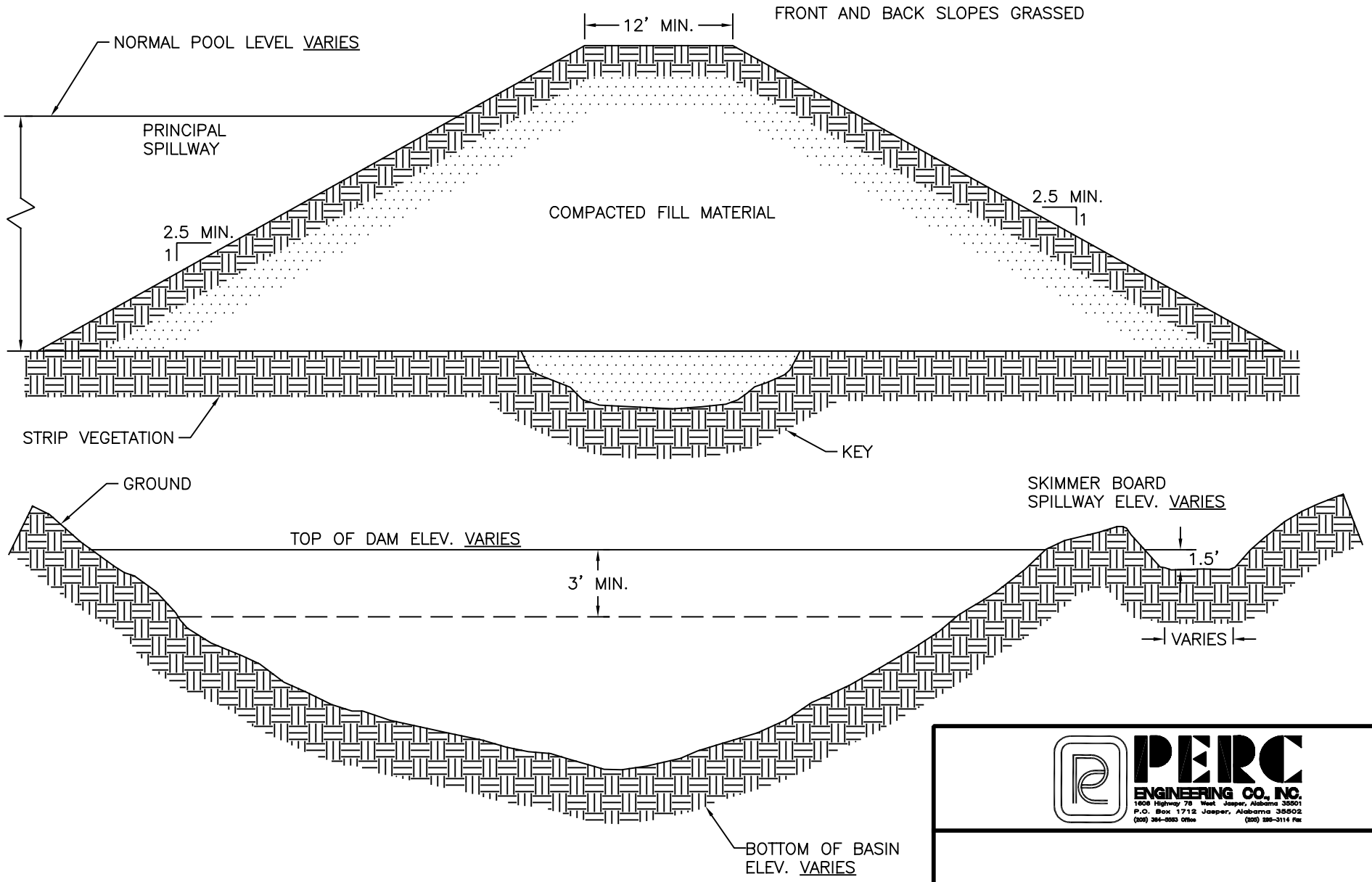
PERC
ENGINEERING CO., INC.
1608 Highway 78 West Jasper, Alabama 35501
P.O. Box 1712 Jasper, Alabama 35502
(205) 384-3553 Office (205) 256-3114 Fax

TYPICAL PLANVIEW OF EMBANKMENT POND

DRAWN BY: P.T.O. DWG. NAME: TYPICALS	DATE: 8–10–05
APPROVED BY: W.K.M.	SCALE: NONE

ATTACHMENT III–B–2–A

C:\PTO\WKM\TYPICALS.dwg 08/10/05 09:06



TYPICAL DAM DETAIL
NO SCALE

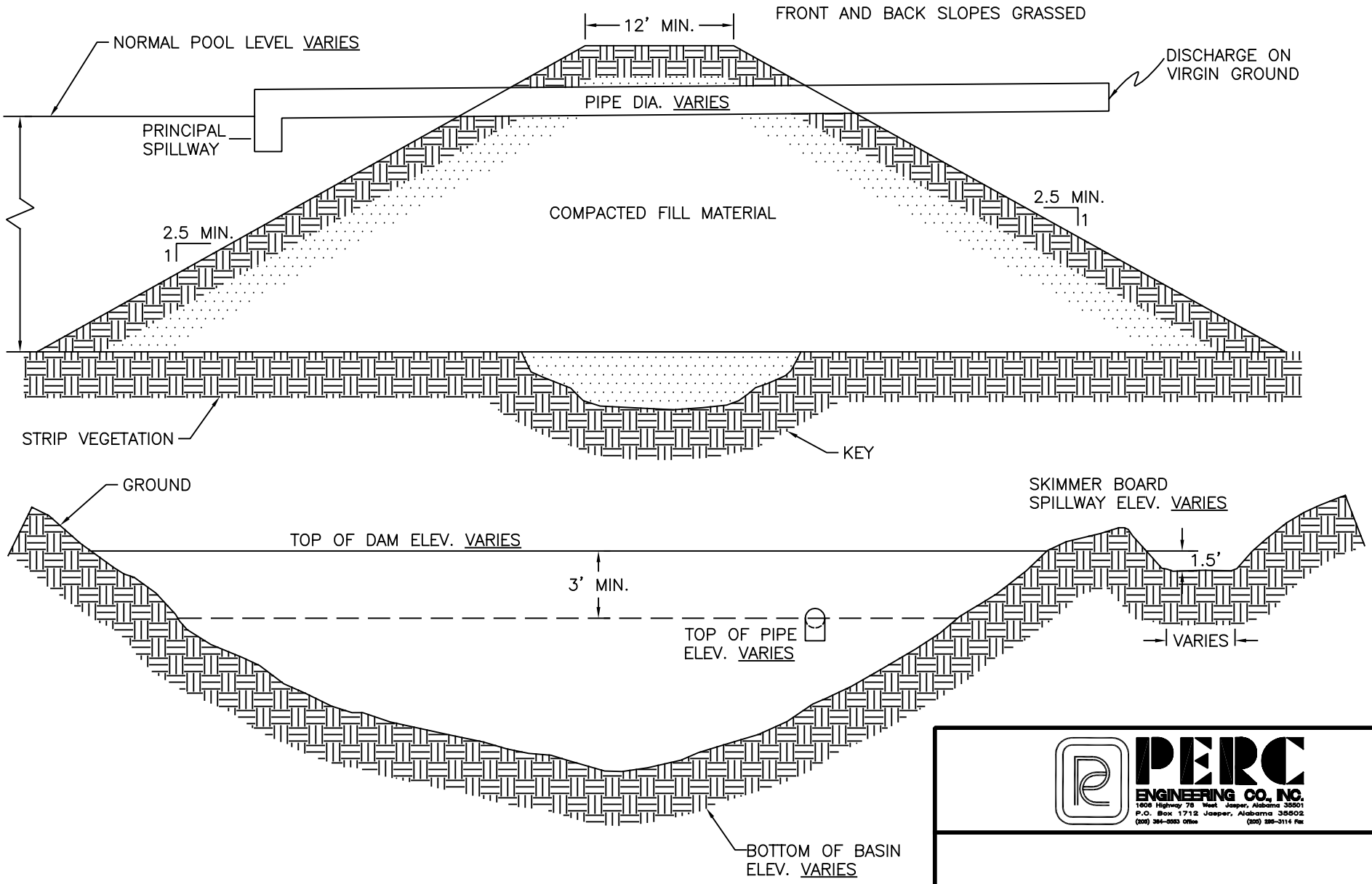
ATTACHMENT III-B-2-A

PERC ENGINEERING CO., INC.
1606 Highway 78 West Jasper, Alabama 35501
P.O. Box 1712 Jasper, Alabama 35502
(205) 384-3553 Office (205) 295-3114 Fax

TYPICAL DAM DETAIL

DRAWN BY: P.T.O. DWG. NAME: TYPICALS	DATE: 8-10-05
APPROVED BY: W.K.M.	SCALE: NONE

C:\PTO\WKM\TYPICALS.dwg 08/10/05 09:06



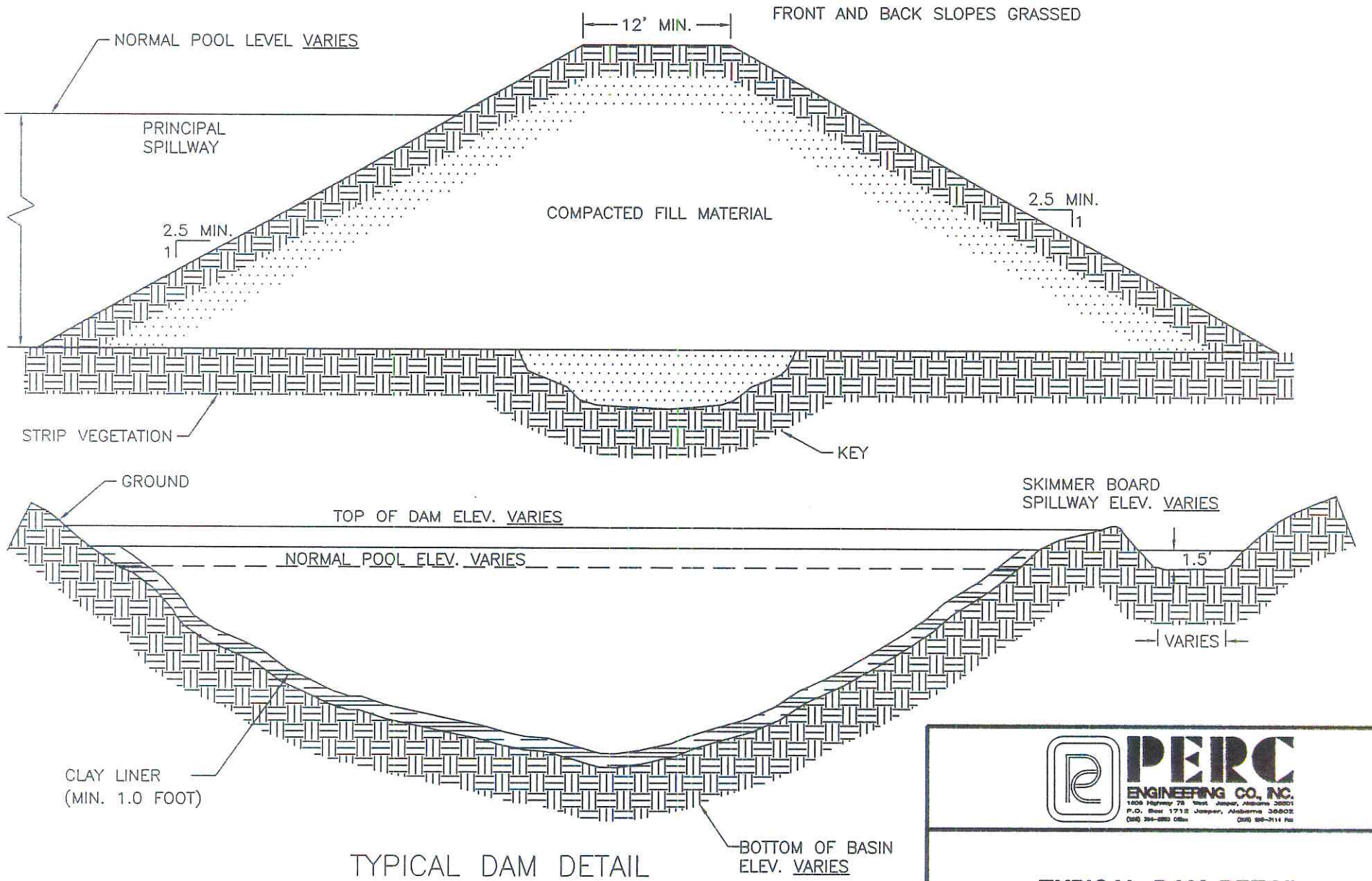
TYPICAL DAM DETAIL
NO SCALE

ATTACHMENT III–B–2–A

PERC ENGINEERING CO., INC.
1606 Highway 78 West Jasper, Alabama 35501
P.O. Box 1712 Jasper, Alabama 35502
(205) 384-3553 Office (205) 295-3114 Fax

TYPICAL DAM DETAIL

DRAWN BY: P.T.O. DWG. NAME: TYPICALS	DATE: 8–10–05
APPROVED BY: W.K.M.	SCALE: NONE



TYPICAL DAM DETAIL
NO SCALE

Lined with 1.0 feet (minimum) of clay material with a permability no greater than 1 X 10^-6 cm/sec up to the emergency spillway elevation to minimize infiltration and to provide a stable pool level with the clay placed in 6" lifts compacted to 95% of standard proctor.

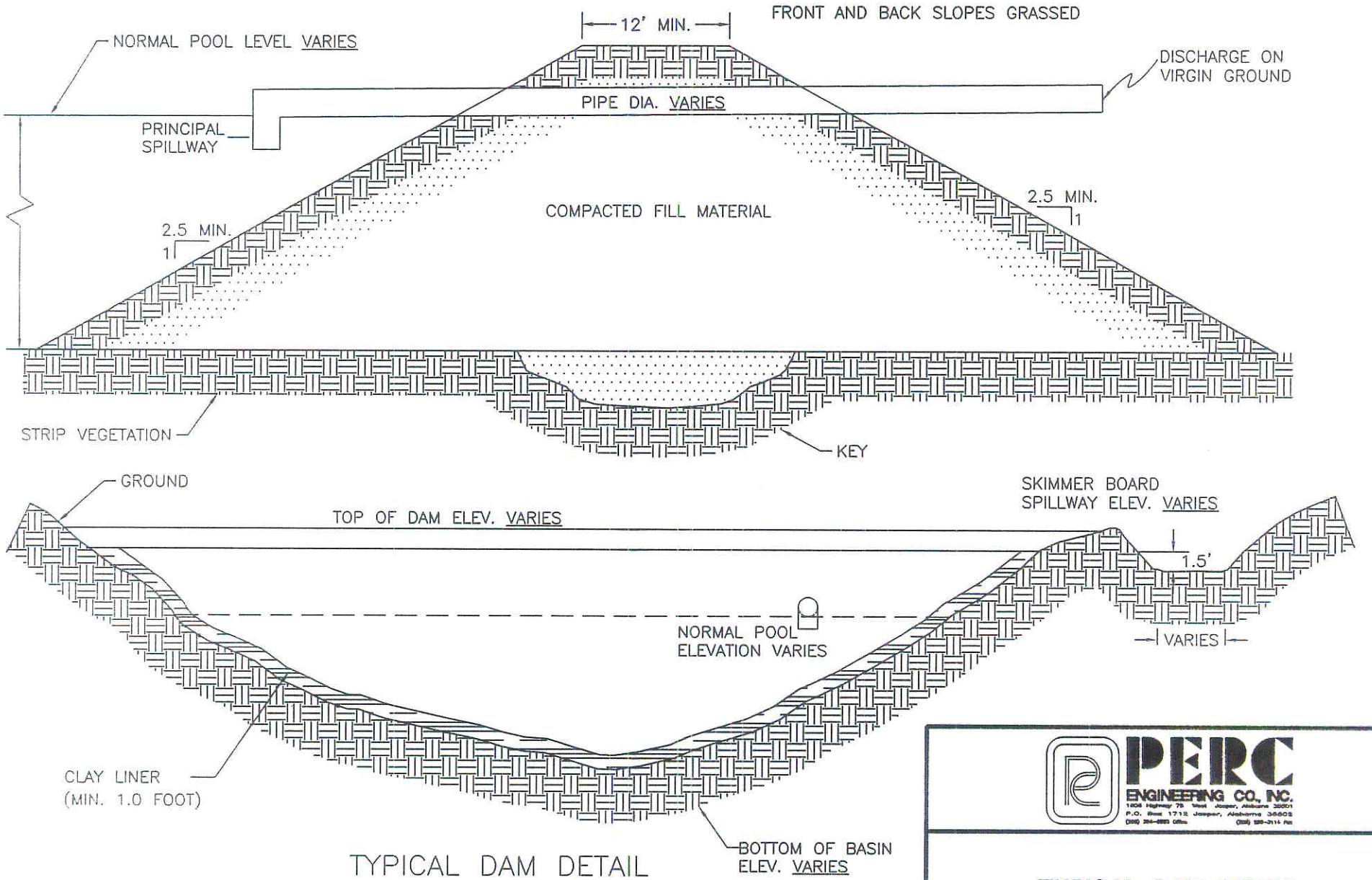
ATTACHMENT III-B-2-A

PERC ENGINEERING CO., INC.
1609 Highway 78 West, Jasper, Alabama 35501
P.O. Box 1712 Jasper, Alabama 35502
(205) 384-6853 Office (205) 696-7114 Fax

TYPICAL DAM DETAIL WITH CLAY LINER

DRAWN BY: J.W.T. DWG. NAME: TYPICALS	DATE: 4/10/2009
APPROVED BY: L.G.S.	SCALE: NONE

V:\Engl05\Typicals\III-B-2(a)\Clay Lined-Attachment III-B-2(a).dwg 04/10/09 11:16



TYPICAL DAM DETAIL
NO SCALE

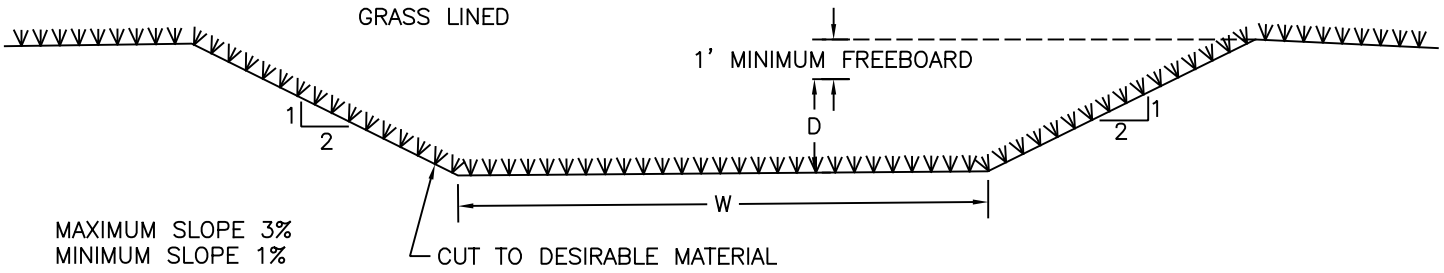
Lined with 1.0 feet (minimum) of clay material with a permability no greater than 1 X 10^-6 cm/sec up to the emergency spillway elevation to minimize infiltration and to provide a stable pool level with the clay placed in 6" lifts compacted to 95% of standard proctor.

ATTACHMENT III-B-2-A

PERC ENGINEERING CO., INC.
1606 Highway 78 West Jasper, Alabama 35501
P.O. Box 1712 Jasper, Alabama 35502
(205) 384-6851 Office (205) 384-7114 Fax

TYPICAL DAM DETAIL WITH CLAY LINER

DRAWN BY: J.W.T. DWG. NAME: TYPICALS	DATE: 4/10/2009
APPROVED BY: L.G.S.	SCALE: NONE



$Q = \frac{1.49}{N} A R^{\frac{2}{3}} S^{\frac{1}{2}}$

N(LOOSE STONE OR GRASS LINED) = 0.035

A = AREA

R = AREA/WETTED PERIMETER

S = SLOPE

* GRASS LINING: FESCUE, BERMUDA, RYE GRASS

DIVERSION CHANNEL DEPTH (D) FOR WIDTH (W) 8.0 FT.	
PEAK FLOW Q (CFS)	DEPTH D (FT)
1–15	0.5
15–50	1.0
50–100	1.5
100–180	2.0
180–270	2.5

DIVERSION CHANNEL DEPTH (D) FOR WIDTH (W) 10.0 FT.	
PEAK FLOW Q (CFS)	DEPTH D (FT)
0–15	0.5
15–60	1.0
60–120	1.5
120–210	2.0
210–320	2.5

DIVERSION CHANNEL DEPTH (D) FOR WIDTH (W) 12.0 FT.	
PEAK FLOW Q (CFS)	DEPTH D (FT)
0–20	0.5
20–70	1.0
70–150	1.5
150–250	2.0
250–383	2.5

DIVERSION CHANNEL DEPTH (D) FOR WIDTH (W) 15.0 FT.	
PEAK FLOW Q (CFS)	DEPTH D (FT)
0–20	0.5
20–90	1.0
90–180	1.5
180–300	2.0
300–450	2.5

PERC
ENGINEERING CO., INC.
1606 Highway 78 West Jasper, Alabama 35501
P.O. Box 1712 Jasper, Alabama 35502
(205) 384-5553 Office (205) 295-3114 Fax

TYPICAL PERMANENT DIVERSION FOR BASIN DISPOSAL

DRAWN BY: P.T.O. DWG. NAME: TYPICALS	DATE: 8–10–05
APPROVED BY: W.K.M.	SCALE: NONE

ATTACHMENT III–B–2–A

C:\PTO\WKM\TYPICALS.dwg 08/10/05 09:06

Applicant: Gunner-Reilly, Corp.
Mine Name: Cane Creek Mine
Permit Number: P-

Attachment III-B-2-A

Pond Construction Criteria

The embankment for sediment basins (temporary and permanent) shall be designed and built using the following as minimum criteria:

1. The top of the dam shall be no less than 12 feet wide.

2. See design sheet for maximum and minimum embankment slopes.

3. The foundation and abutments for the impounding structure shall be designed to be stable under all conditions of construction and operation of the impoundments, with a minimum static safety factor of 1.5 for the normal pool with steady seepage saturation conditions, and a seismic safety factor of at least 1.20.

4. The dam shall be constructed with a cutoff trench based upon prudent engineering practices for the site. The cutoff shall be located on the dam centerline and be of sufficient depth to extend into a relatively impervious material from which the core of the dam shall also be constructed.

5. The embankment foundation area shall be cleared of all organic matter, all surfaces sloped to no steeper than lv:lh, and the entire foundation surface scarified.

6. The entire embankment and cutoff trench shall be compacted to 95 percent density, based on standard proctor as outlined in ASTM.

7. The material placed in the embankment shall be free of sod, roots, stones over 6 inches in diameter, and other objectionable materials. The fill material shall be placed and spread over the entire fill area, starting at the lowest point of the foundation, in layers not to exceed 12 inches in thickness. Construction of the fill shall be undertaken only at such times that the moisture content of the fill material will permit satisfactory compaction in accordance with paragraph 5.

8. The pool area of the basin will be cleared of timber and large undergrowth.

9. The primary decant system when consisting of a pipe shall be installed according to Class C pipe installation for embankment bedding.

10. The primary decant system shall be equipped with a device, or constructed, such as to insure that subsurface withdrawal is accomplished to prevent discharge of floating solids. If a

channel is used as the primary decant a skimmer shall be installed to prevent floating solids from discharging.

11. A splash pad or riprap may be required under the discharge of the primary decant system where necessary to insure that the discharge does not erode the embankment.

12. The combination primary and secondary decant system shall be designed to safely carry the expected peak flow from a 25 year - 6 hour storm. The entire emergency overflow spillway channel will be a stabilized channel and will be stabilized upon completion of construction as specified within the detailed design plans using prudent engineering measures. These measures may consist of lining the spillway with concrete or a durable rock riprap, or the spillway being constructed in consolidated non-erodible material and planted with a mixture or both annual and perennial grasses, or a combination of any or all of the above.

13. Sediment basins using a single spillway system shall be an open channel of non-erodible construction consisting of concrete, durable rock riprap or its being constructed in consolidated non-erodible material as specified in the detailed design plans.

14. The settled embankment for temporary impoundments shall be a minimum of 1.0 foot above the maximum water elevation for the runoff from a 25 year - 6 hour, or a 10 year - 24 hour precipitation event (whichever has the greatest runoff). The settled embankment for permanent impoundments shall be a minimum of 1.0 foot above the maximum water elevation for the runoff from a 25 year - 6 hour, or a 10 year - 24 hour precipitation event (whichever has the greatest runoff).

15. If basins are built in series, then the combined decant system for each shall be designed to accommodate the entire contributing drainage area.

16. The dam and all disturbed areas shall be seeded with both perennial and annual grasses, fertilized and mulched in order to insure erosion is minimized. Hay bales or riprap may be placed at the toe of the dam immediately upon completion of construction.

17. The constructed height of the dam shall be increased a minimum of 5 percent over the design height to allow for settlement over the life of the embankment.

18. Final graded slopes of the entire permanent water impoundment area shall not exceed 2.5H-1.0V to provide for adequate safety and access for proposed water users.

19. Prior to Phase II bond release, additional data concerning water quality, water quantity, depth, size, configuration, postmining land use, etc., for each proposed permanent water impoundment, shall be submitted to the Regulatory Authority for permanent water impoundment approval.

20. All sediment basins will be inspected for stability, erosion, etc. two (2) times a month until removal of the structure or release of the reclamation bond.

21. The embankment and spillway will be maintained by repairing any damage such as erosion, slope failure or spillway damage until removal of the structure or release of the performance bond.

22. All ponds shall be examined quarterly for structural weakness, instability, erosion, or other hazardous conditions and maintenance performed as necessary. Formal inspections shall be made on an annual basis, including any reports or modifications, in accordance with 880-X-10C-.20[l(j)] of the Alabama Surface Mining Commission Regulations.

23. Sediment will be removed from each pond when the accumulated sediment reaches the sediment storage volume as shown on the detailed design sheet.

24. Upon completion of mining, successful reclamation and effluent standards being met, each sediment basin not remaining as a permanent water impoundment will be dewatered in an environmentally safe manner (such as siphoning, pumping, etc.) and reclaimed to approximate original contours by the following procedure: A permanent diversion channel (designed for a 10 year - 24 hour precipitation event) shall be cut along the outer edge of the basin to re-route drainage around the basin and back through the stabilized spillway to allow reclamation of the sediment basin. The diversion channel shall be designed and grassed as per enclosed information. (See permanent diversion for basin disposal).Upon completion of the diversion channel the back slope of the dam shall be graded to a minimum 3H to 1V slope. The dewatered sediment basin area shall be seeded with some combination of the following: Fescue, bermuda, rye grass, canary grass and willows. After seeding the area shall be mulched. Any additional sediment or embankment material not used to meet original contour, if non-toxic, shall be spread in thin layers within the permit area and vegetated as stated in the approved reclamation plan. All toxic material encountered in the basin disposal shall be buried and covered with 4 feet of non-toxic material and vegetated as stated in the approved reclamation plan.

25. A qualified registered professional engineer or other qualified professional specialist, under the direction of the professional engineer shall conduct regular inspections during construction and upon completion shall inspect each basin for certification purposes.

26. Point source discharge embankments shall be constructed and abutments keyed into desirable material if at all possible. In the event that undesirable material is encountered, addition design and construction criteria shall be submitted prior to certification.

Applicant: Gunner-Reilly, Corp.
Mine Name: Cane Creek Mine
Permit Number: P-3952

(b) Describe in detail the proposed diversion and include plans, maps and cross-sections which comply with 816.43 and 816.44.

Permanent diversions required for the Cane Creek Mine are shown on the permit map and a typical section of proposed diversions is included in this application and described in the design and construction guidelines for diversions as prepared for Gunner-Reilly Corp.

Should the need for diversions other than those shown become evident, they will be constructed under the same Guidelines within the area permitted and bonded.

See Attachment III-B.-3. for referenced Guidelines.

See Attachment III-B.-3., Diversion Ditch 1-2 & 3-4 Detailed Design Plans.

(c) If diversions are temporary, enclose plans for removal, including a timetable and plans for restoration of vegetation, channel characteristics, etc.

Not Applicable

(d) Enclose approvals of other government agencies, where required.
None required.

Applicant: Gunner-Reilly, Corp.
Mine Name: Cane Creek Mine
Permit Number: P-

Attachment III-B-3

SPECIFICATIONS FOR DIVERSION CHANNELS AND DIVERSION BERMS

1. Temporary diversions shall be constructed to pass safely the peak runoff from a 2-year, 6-hour precipitation event.

2. To protect fills and property and to avoid danger to public health and safety, permanent diversions shall be constructed to pass safely the peak runoff from a 10-year, 6-hour precipitation event. Permanent diversions shall be constructed with gently sloping banks that are stabilized by vegetation.

3. Diversions shall be designed, constructed, and maintained in a manner which prevents additional contributions of suspended solids to stream flow and to runoff outside the permit area, to the extent possible, using the best technology currently available. Appropriate sediment control measures for these diversions may include, but not be limited to, maintenance of appropriate gradients, channel lining, revegetation, roughness structures, and detention basins.

4. No diversion shall be located so as to increase the potential for land slides and no diversion shall be constructed on existing land slides.

5. When no longer needed, each temporary diversion shall be removed and the affected land regraded, topsoiled, and revegetated in accordance with Rules 880-X-10C-.10, 880-X-10C-.11, 880-X-10C-.52 - 880-X-10C-.58, 880-X-10C-.60, and 880-X-10C-.62.

6. Channel linings, when slopes are between 1-3 percent shall consist of both perennial and annual grasses and when slopes are greater than 3 percent, shall consist of riprap or be cut into non-erodible material.

7. Freeboard shall provide protection for transition of flows and for critical areas such as swales and curves along the entire channel length.

8. Energy dissipators shall be installed, when necessary, at discharge points where natural streams and exit velocity of the diversion ditch flow is greater than that of the receiving stream.

9. Excess excavated material not necessary for diversion channel geometry or regrading of the channel shall be disposed of in accordance with Rule 880-X-10C-.36.

10. Topsoil removed from the diversion excavations shall be handled in accordance with Rule 880-X-10C-.07 through 880-X-10C-.11.

11. Diversions shall not be constructed or operated to divert water into underground mines.

12. The embankment or berm foundation area shall be cleared of all organic matter, all surfaces sloped to no steeper than lv:lh and the entire foundation surface scarified.

13. The entire embankment or berm shall be compacted to 95% density, based on standard proctor as outlined in ASTM.

14. The material placed in the berm shall be free of sod, roots, stones over 6 inches in diameter, and other objectionable materials. The fill material shall be placed and spread over the entire fill area, starting at the lowest point of the foundation, in layers not to exceed 12 inches in thickness. Construction of the fill shall be undertaken only at such times as the moisture content of the fill material will permit satisfactory compaction in accordance with paragraph 13.

15. The berm and all disturbed areas shall be seeded with both perennial and annual grasses in order to insure that erosion is minimized. Hay bales or riprap may be placed at the toe of the berm immediately upon completion of construction.

16. All berms shall be examined quarterly for structural weakness, instability, erosion, or other hazardous conditions and maintenance performed as necessary.

4. Disposal of excess spoil. (780.35, 816.71)

Are excess spoil fills proposed?

( ) Yes (X) No

If yes, complete the following:

(a) Show on a map the location of all proposed fills and provide cross-sections of the proposed site and the design of the disposal structures.

(b) Include the results of the geotechnical investigation showing:

(1) A description of physical characteristics of bedrock and geological conditions in the disposal area; and

(2) A determination of possible adverse affects from subsidence due to past, present or future underground mining.

(3) Location of springs, seeps, or other ground water observed or anticipated in the disposal area.

(4) A technical description of the rock to be used in construction of rock chimney cores or rock drainage blankets, if applicable.

(5) Results of stability analyses including strength parameters, pore pressures and long term seepage conditions; and

(6) Engineering design assumptions, calculations, and any alternatives considered.

(c) Describe the construction, operation, maintenance and removal (if applicable) of the structure.

(d) Include a surface water drainage and control plan for the fill.

(e) Are rock-toe buttresses or keyway cuts to be used?

( ) Yes ( ) No

If yes, describe or show:

(1) The number, location and depth of test borings or test pits used in describing subsurface conditions; and

(2) Engineering specifications used in the design.

Applicant: Gunner-Reilly, Corp.
Mine Name: Cane Creek Mine
Permit Number: P-3952

5. Transportation Facilities (780.33, 780.37)

(a) Describe the measures to be taken to ensure the interest of the public and landowners affected are protected if disturbance within 100 feet of the right-of-way or relocation of a public road is proposed.

1) Safety berms will be constructed adjacent to roadways to be disturbed to contain traffic.
2) Proper signs, informing the traveling public of the disturbance, will be posted along the road right-of-ways 500 feet from the beginning of the disturbance.
3) All safety requirements of the appropriate public health and safety, will be followed.

(b) Describe any unique design, feature, or structure which is necessary for the road to meet the performance standards of Subchapter K using any necessary maps, plans, or cross-sections.

See Attachments III-B-5, III-B-5(b) for specifications and detailed designs of the road at this facility. See Attachment III-B-5, Detailed Design Plans for Primary Roads 1P and Primary Roads 2P, 3P, & 4P.

(c) Describe, in detail, the measures to be taken during construction, maintenance and use of the transportation facilities to prevent damage to fish and wildlife and their habitat; public and private property; and erosion, siltation, and pollution of water.

Roads will be constructed with the required ditching for proper drainage. Roads will be maintained with a dozer and motor grader patrol as required. Water will be used to reduce erosion and dust emissions. Roads will be located on ridge tops where possible or on the most stable slopes to minimize erosion. Vegetation will not be cleared except as necessary for roadway and ditch construction. After construction of the roads is complete, vegetation will be established on cut and fill slopes that exist along the all roads. To the extent possible, roads will be located above the sediment basins to be constructed for the mining operation in an effort to control or prevent additional contributions of suspended solids to stream flow or runoff outside the permit area and to comply with State and Federal water quality standards applicable to receiving waters and avoid the alteration of the normal flow of water in streambeds or drainage channels while preventing or controlling damage to public or private property. Where it is not possible or is impractical to locate roads in this manner, sediment control devices such as silt fencing, hay bale check dams and rock filter check dams will be used as necessary to maintain water quality. Roads not required for fire and sediment basin access will be reclaimed. See Attachment III-B-5, Attachment III-B-5(b), and Specifications for the construction, maintenance, and reclamation of primary roads.

Applicant: Gunner-Reilly, Corp.
Mine Name: Cane Creek Mine
Permit Number: P-

SPECIFICATIONS FOR THE CONSTRUCTION, MAINTENANCE AND RECLAMATION OF ANCILLARY ROADS

1. To the extent possible, roads will be located on ridges or on the most stable available slopes to prevent or minimize erosion, downstream sedimentation and flooding in an effort to prevent adverse effects to fish, wildlife and related environmental values.

2. To the extent possible, roads will be located above the sediment basins to be constructed for the mining operation in an effort to control or prevent additional contributions of suspended solids to stream flow or runoff outside the permit area and to comply with State and Federal water quality standards applicable to receiving waters and avoid the alteration of the normal flow of water in streambeds or drainage channels while preventing or controlling damage to public or private property. Where it is not possible or is impractical to locate roads in this manner, sediment control devices such as silt fencing, hay bale check dams and rock filter check dams will be used as necessary to maintain water quality.

3. Prior to construction, the roadway will be cleared, grubbed and will have the topsoil removed. The clearing limits will be kept to the minimum necessary to accommodate the roadbed and associated ditch construction.

4. Roads will be constructed of suitable subgrade material compacted to ninety-five percent of the standard proctor density and will have a minimum width of ten feet and a maximum width necessary to accommodate the largest equipment traveling the road.

5. Roadbeds will be cut to consolidated non-erodible material or will be surfaced with durable non-toxic, non-acid forming substances. It is anticipated that durable sandstone overburden on site will be utilized as surfacing material. If there should not be adequate sandstone on site, then a durable sandstone material, chert, crushed limestone, crushed concrete, crushed asphalt, red rock, ironore refuse, gravel, or other durable non-toxic, non-acid forming material approved by the Regulatory Authority will be hauled in from off site and placed on the roadbed to a depth of two inches.

6. No sustained grades will exceed ten percent unless deemed necessary, in which case appropriate sediment control facilities will be constructed. If grades in excess of fifteen percent are required, cross drains, ditch relief drains and road drainways will be located at a minimum distance of three-hundred feet.

7. Roads will be constructed so as to have adequate drainage utilizing ditches, cross drains and ditch relief drains. Roads will not be located in the channel of an intermittent or perennial stream unless specifically approved by the Alabama Surface Mining Commission. Additionally, no relocation and/or alteration of an intermittent or perennial stream will be done unless specifically approved by the Alabama Surface Mining Commission. In the event that it becomes evident that any drainage structures including culverts, bridges and/or low water crossings will be required in order to cross an intermittent or perennial stream, the structure will be designed in accordance with Alabama Surface Mining Commission requirements and prudent engineering practice and the approval of the design(s) will be acquired prior to the commencement of construction. Hay bale check dams and silt fences will be used at strategic locations when necessary to control sediment runoff. Immediately upon completion of construction, the side slopes of the road embankments and/or cuts will be fertilized, seeded with annual and perennial grasses and mulch will be added to aid in the prevention of erosion and to enhance seed germination. The seed mix will consist of, but is not limited to, some combination of the following species: bermuda grass, fescue, lespedeza, rye grass, brown top millet, clover and vetch. The particular species to be planted will vary with the planting season at the time of seed application.

8. Routine maintenance will be required to assure that the road continually meets performance standards and will consist of periodic grading, resurfacing, dust suppression and maintenance of sediment control facilities. Dust suppression will consist of the application of water, chemical binders and/or other dust suppressants. No oil will be utilized in this process. Spot seeding, fertilizing and mulching will be performed as necessary to improve vegetative cover on roadway slopes. A road damaged by a catastrophic event shall be repaired as soon as practicable after the damage has occurred.

9. Roads not to be retained as part of the post mine land use shall be reclaimed in accordance with the approved reclamation plan for this permit as soon as practicable after they are no longer needed as part of the mining and reclamation operation, using the following procedures:

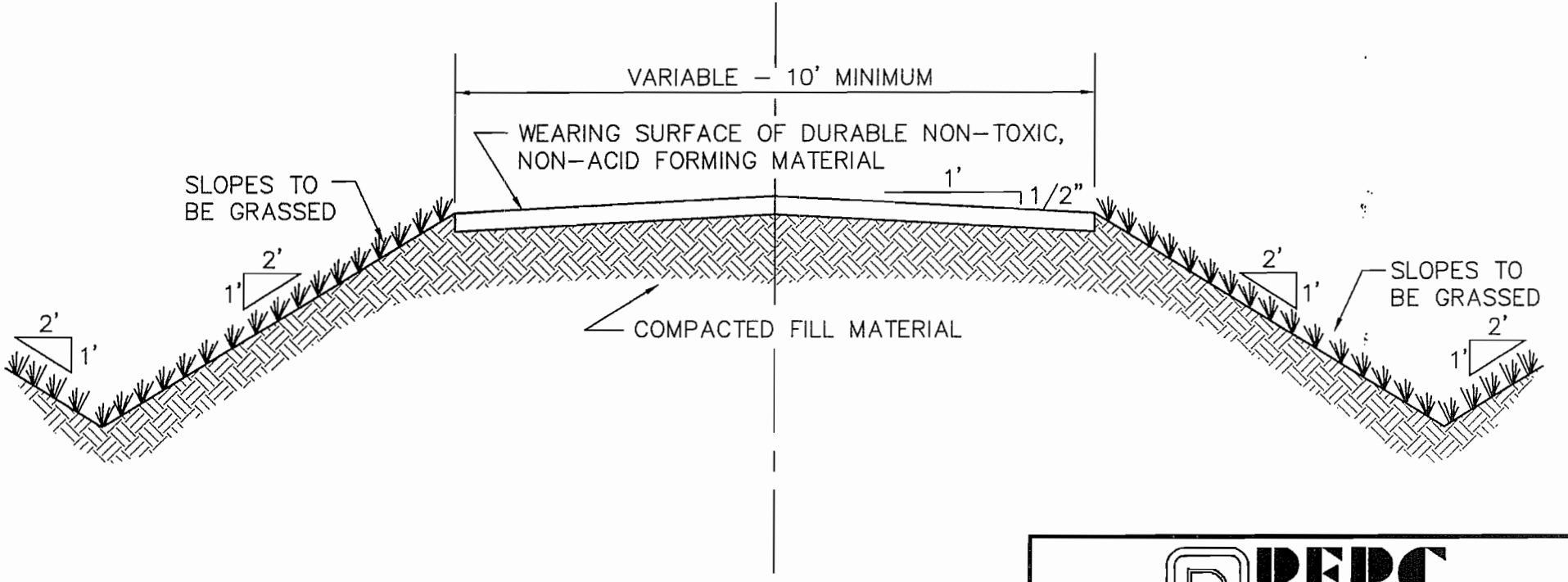
   a. The road will be closed to traffic.
   b. All bridges, culverts and other drainage structures not approved as part of the post mine land use will be removed.
   c. All road surfacing materials that are not compatible with the post mine land use or revegetation requirements will be properly disposed of on-site or removed from the site for re-use.

d. Roadway cut and fill slopes shall be regraded and reshaped to be compatible with the post mine land use and to compliment the natural drainage pattern of the surrounding terrain.
e. The natural drainage patterns shall be protected from surface runoff and erosion utilizing the installation of dikes and/or cross drains as necessary.
f. The roadbed shall be ripped or scarified as necessary, the topsoil or substitute or approved growing medium shall be replaced and revegetated in accordance with the approved reclamation plan for this permit.

10. The following drawings illustrate typical roadbed configurations for ancillary roads.

TYPICAL HAUL ROAD
FILL SECTION

NO SCALE



PERC ENGINEERING CO., INC.
1606 Highway 78 West, Jasper, Alabama 35501
P.O. Box 1712 Jasper, Alabama 35502
(205) 384-4566 Office (205) 384-9491 Fax

TYPICAL FILL SECTION
ANCILLARY HAUL ROAD

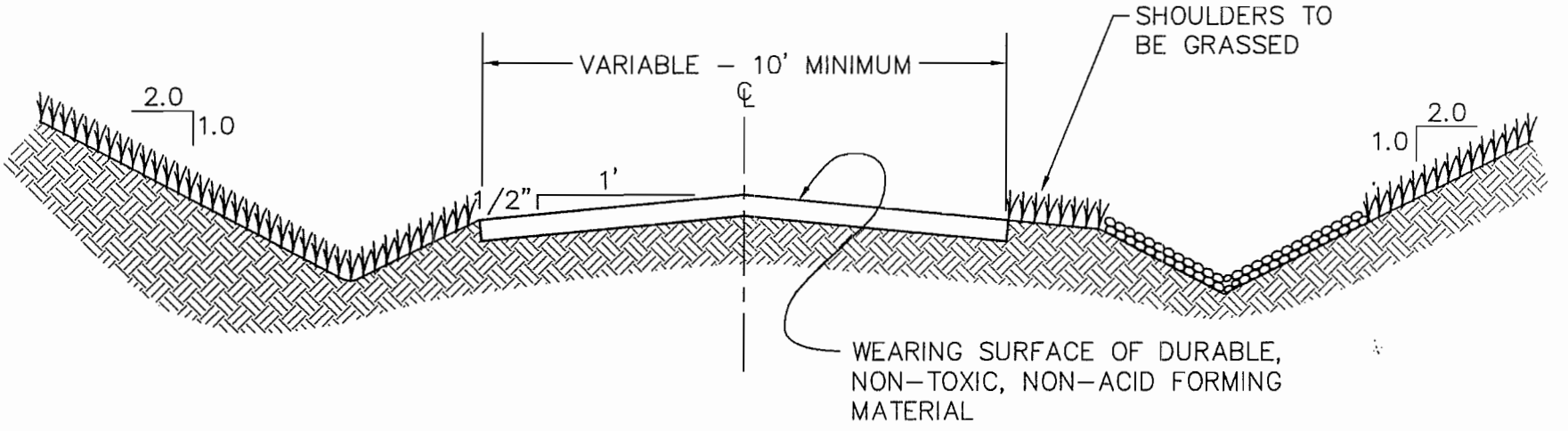
DRAWN BY: K.D.P. DWG. NAME: TYPHAULA	DATE: 2–3–97
APPROVED BY: S.R.I.	SCALE: NONE

ATTACHMENT III.–B.–5.

K:\S\TYPHAULA 02/03/97 16:56

TYPICAL HAUL ROAD
CUT SECTION

NO SCALE



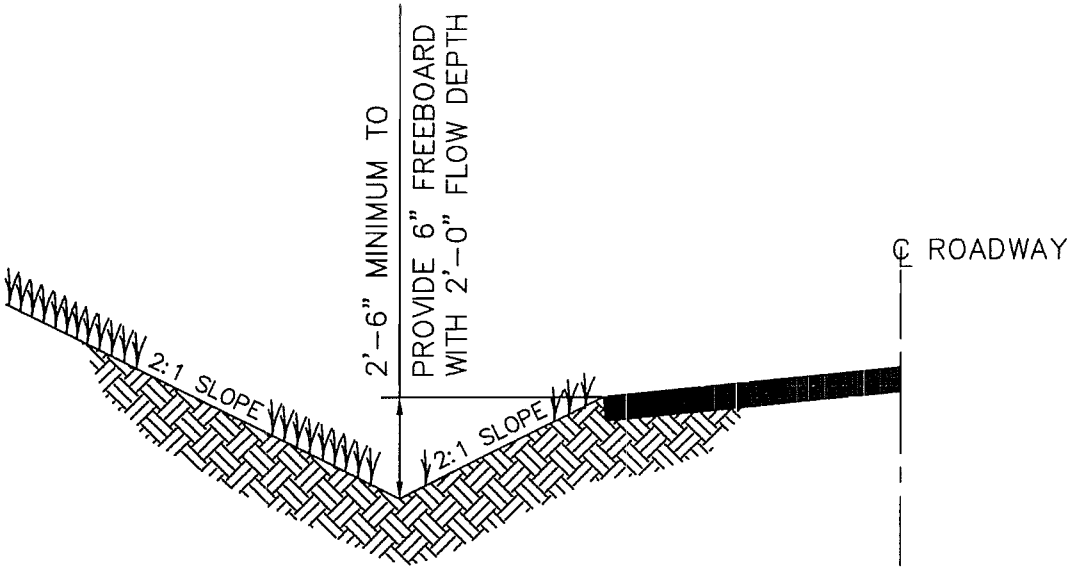
PERC ENGINEERING CO., INC.

TYPICAL CUT SECTION
ANCILLARY HAUL ROAD

DRAWN BY: K.D.P. DWG. NAME: TYPHAULB	DATE: 2–3–97
APPROVED BY: S.R.I.	SCALE: NONE

ATTACHMENT III.–B.–5.

K:\SS\TYPHAULB 02/04/97 08:08



MINIMUM DITCH GRADIENT = 1%

MAXIMUM DITCH GRADIENT = 5%

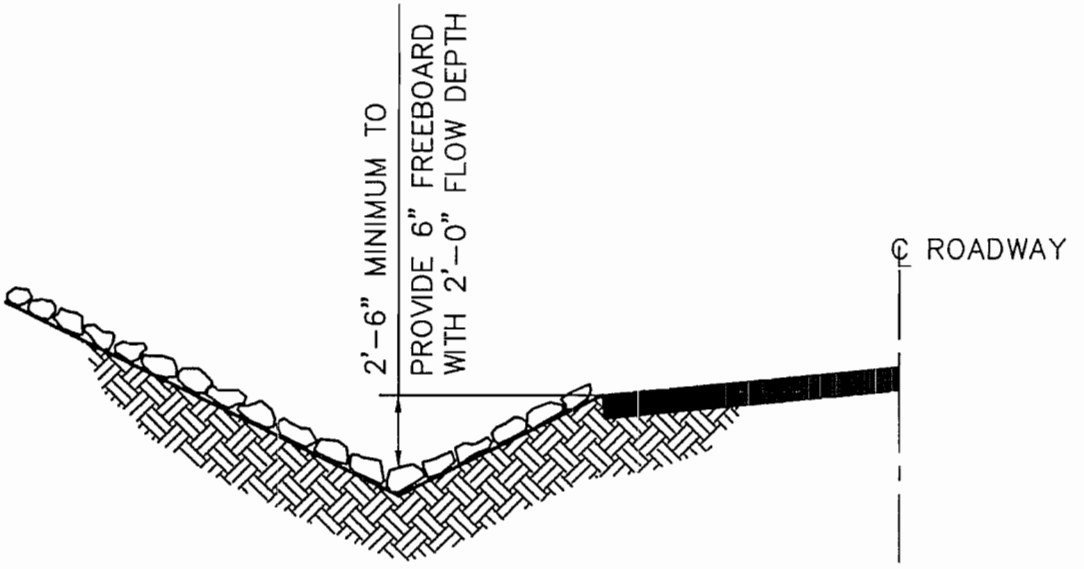
DITCH CHANNEL TO BE VEGETATED WITH A MIXTURE OF BERMUDA GRASS, FESCUE, AND LESPEDEZA TO CONFORM TO CLASS "D" RETARDANT CLASS.

PERC
ENGINEERING CO., INC.
1608 Highway 78 West Jasper, Alabama 35501
P.O. Box 1712 Jasper, Alabama 35502
(205) 384-6666 Office (205) 384-6491 Fax

TYPICAL ANCILLARY ROADWAY DITCH CROSS SECTION

DRAWN BY: K.D.P. DWG. NAME: ANCIROAD	DATE: 2-4-97
APPROVED BY: R.E.P.	SCALE: NONE

K:\S\ANCIROAD 02/04/97 08:01



DITCH GRADIENT 5% TO 10%

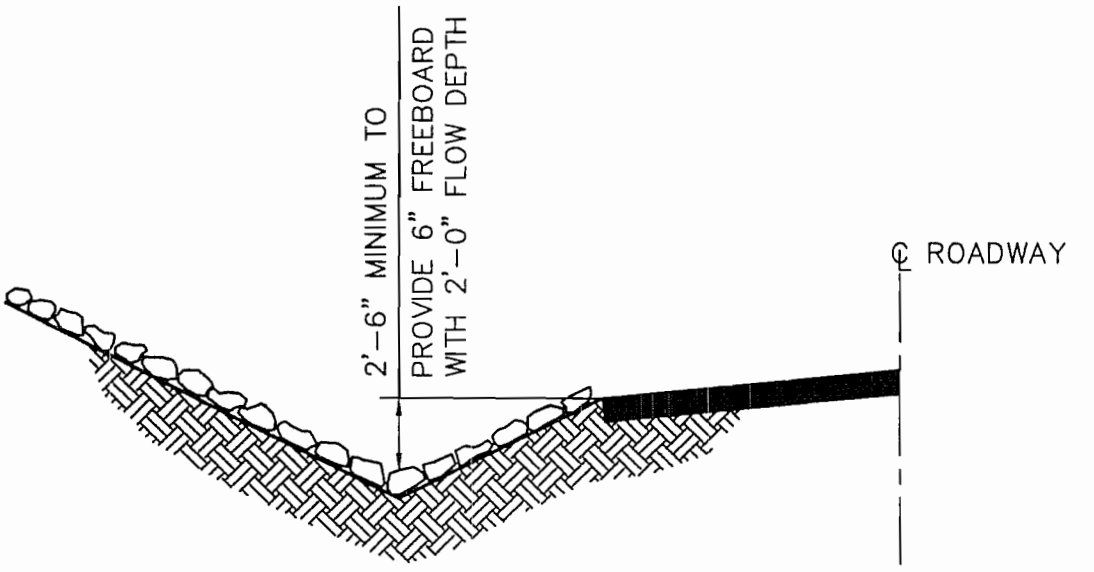
DITCH CHANNEL TO BE LINED WITH NON-ERODIBLE NON-TOXIC, NON-ACID FORMING SANDSTONE OR LIMESTONE RIP-RAP. THE RIP-RAP WILL BE "CLASS 1" RIP-RAP AND HAVE A MINIMUM THICKNESS OF 12".

PERC
ENGINEERING CO., INC.
1604 Highway 78 East, Jasper, Alabama 35501
P.O. Box 1713 Jasper, Alabama 35502
(205) 384-5555 office (205) 384-1491 fax

TYPICAL ANCILLARY ROADWAY DITCH CROSS SECTION

DRAWN BY: K.D.P. DWG. NAME: PRIMRD1	DATE: 2-4-97
APPROVED BY: R.E.P.	SCALE: NONE

K:\S\PRIMRD1 02/04/97 08:31



DITCH GRADIENT 11% TO 17%

DITCH CHANNEL TO BE LINED WITH NON-ERODIBLE NON-TOXIC, NON-ACID FORMING SANDSTONE OR LIMESTONE RIP-RAP. THE RIP-RAP WILL BE "CLASS 2" RIP-RAP AND HAVE A MINIMUM THICKNESS OF 16".

PERC ENGINEERING CO., INC.

TYPICAL ANCILLARY ROADWAY DITCH CROSS SECTION

DRAWN BY: K.D.P. DWG. NAME: PRIMRD2	DATE: 2-4-97
APPROVED BY: R.E.P.	SCALE: NONE

K:\SS\PRIMRD2 02/04/97 08:33

Applicant: Gunner-Reilly, Corp.
Mine Name: Cane Creek Mine
Permit Number: P-

SPECIFICATIONS FOR THE CONSTRUCTION, MAINTENANCE AND RECLAMATION OF PRIMARY ROADS

1. Primary roads shall be designed by or under the direction of a registered professional engineer in accordance with the Alabama Surface Mining Commission rules and regulations and prudent engineering practice.

2. Each roadway embankment will be designed and constructed so as to have a minimum static safety factor of 1.3.

3. To the extent possible, roads will be located on ridges or on the most stable available slopes to prevent or minimize erosion, downstream sedimentation and flooding in an effort to prevent adverse effects to fish, wildlife and related environmental values.

4. To the extent possible, roads will be located above the sediment basins to be constructed for the mining operation in an effort to control or prevent additional contributions of suspended solids to stream flow or runoff outside the permit area and to comply with State and Federal water quality standards applicable to receiving waters and avoid the alteration of the normal flow of water in streambeds or drainage channels while preventing or controlling damage to public or private property. Where it is not possible or is impractical to locate roads in this manner, sediment control devices such as silt fencing, hay bale check dams and rock filter check dams will be used as necessary to maintain water quality. No fording of intermittent or perennial streams will be conducted unless specifically approved by the Alabama Surface Mining Commission as temporary routes to be used during road construction.

5. Prior to construction, the roadway will be cleared, grubbed and will have the topsoil removed. The clearing limits will be kept to the minimum necessary to accommodate the roadbed and associated ditch construction.

6. Roads will be constructed of suitable compacted subgrade material and will have a minimum width of ten feet and a maximum width necessary to accommodate the largest equipment traveling the road.

7. Roadbeds will be cut to consolidated non-erodible material or will be surfaced with durable non-toxic, non-acid forming substances. The wearing surface will consist of durable sandstone, chert, crushed limestone, crushed concrete, crushed asphalt, red rock, ironore refuse, gravel, or other durable non-toxic, non-acid forming material approved by the Regulatory Authority. The wearing surface will be placed on the roadbed to a depth of four inches.

8. No sustained grades will exceed ten percent unless deemed necessary, in which case appropriate sediment control facilities will be constructed. If grades in excess of fifteen percent are required, cross drains, ditch relief drains and road drainways will be located at a minimum distance of three-hundred feet.

9. Roads will be constructed so as to have adequate drainage utilizing ditches, culverts, cross drains and ditch relief drains designed to safely pass the peak runoff from a ten year, six hour precipitation event. Drainage pipes and culverts shall be installed as designed and will be maintained in a free and operating condition to prevent and control erosion at inlets and outlets. Culverts have been designed to support the load of the heaviest equipment to travel the road and are based on the Handbook of Steel Drainage and Highway Construction Products by the American Iron and Steel Institute and the equipment specifications. Drainage ditches will be constructed and maintained in accordance with the approved design to prevent uncontrolled drainage over the road surface and embankment. Roads will not be located in the channel of an intermittent or perennial stream unless specifically approved by the Alabama Surface Mining Commission. Additionally, no relocation and/or alteration of an intermittent or perennial stream will be done unless specifically approved by the Alabama Surface Mining Commission. In the event that it becomes evident that any drainage structures including culverts, bridges and/or low water crossings will be required in order to cross an intermittent or perennial stream, the structure will be designed and constructed in accordance with Alabama Surface Mining Commission requirements and prudent engineering practice and the approval of the design(s) will be acquired prior to the commencement of construction. Hay bale check dams and silt fences will be used at strategic locations when necessary to control sediment runoff. Immediately upon completion of construction, the side slopes of the road embankments and/or cuts will be fertilized, seeded with annual and perennial grasses and mulch will be added to aid in the prevention of erosion and to enhance seed germination. The seed mix will consist of, but is not limited to, some combination of the following species: bermuda grass, fescue, lespedeza, rye grass, brown top millet, clover and vetch. The particular species to be planted will vary with the planting season at the time of seed application. Upon completion of construction of each phase of the roadway the construction will be certified to the Alabama Surface Mining Commission as having been done in accordance with the approved plans for the roadway and associated facilities.

10. Routine maintenance will be required to assure that the road continually meets performance standards and will consist of periodic grading, resurfacing, dust suppression and maintenance of sediment control facilities. Dust suppression will consist of the application of water, chemical binders and/or other dust suppressants. No oil will be utilized in this process. Spot seeding, fertilizing and mulching will be performed as necessary to improve vegetative cover on roadway slopes. A road damaged by a catastrophic event shall be repaired as soon as practicable after the damage has occurred.

11. Roads not to be retained as part of the post mine land use shall be reclaimed in accordance with the approved reclamation plan for this permit as soon as practicable after they are no longer needed as part of the mining and reclamation operation, using the following procedures:

    a. The road will be closed to traffic.

    b. All bridges, culverts and other drainage structures not approved as part of the post mine land use will be removed.

    c. All road surfacing materials that are not compatible with the post mine land use or revegetation requirements will be properly disposed of on-site or removed from the site for re-use.

    d. Roadway cut and fill slopes shall be regraded and reshaped to be compatible with the post mine land use and to compliment the natural drainage pattern of the surrounding terrain.

    e. The natural drainage patterns shall be protected from surface runoff and erosion utilizing the installation of dikes and/or cross drains as necessary.

    f. The roadbed shall be ripped or scarified as necessary, the topsoil or substitute or approved growing medium shall be replaced and revegetated in accordance with the approved reclamation plan for this permit.

12. The drawings and data contained in the specific design plans illustrate typical roadbed configurations for primary roads as well as site specific design of drainage structures, stability analysis and ditch sections.