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Rec'd via email:
11/07/2025

MAJOR MODIFICATION FORM FOR MINING GENERAL PERMIT

Coverage No. MSR32 2 9 2 7 County MADISON



INSTRUCTIONS

Coverage recipients shall notify the Mississippi Department of Environmental Quality of plans to expand the acreage or "footprint" of an existing mining activity or modify the existing mining operation. This form must be submitted when (check all that apply):

- ☐ SWPPP details have been developed and are ready for MDEQ review for subsequent phases of an existing, covered mining activity
- ☒ "Footprint" identified in the original MNOI is proposed to be enlarged (a modified SWPPP and an updated USGS topographic map must be submitted)
- ☐ Mine dewatering is proposed
- ☐ Mine dewatering has been discontinued
- ☐ Closed loop wash operations are proposed
- ☐ Closed loop wash operations have been discontinued

This form must be signed by the original coverage recipient under Mississippi's Mining General Permit. A different operator must have general permit coverage transferred prior to coverage being modified. Coverage recipients are authorized to discharge storm water associated with proposed expansions of dewater pits or operate a recirculation system with no discharge, under the conditions of the General Permit, only upon receipt of written notification of approval by the MDEQ. If mining activities change which will incorporate a hydraulic dredging operation or a discharge of process wastewaters to State waters additional permitting actions shall be required.

COVERAGE RECIPIENT INFORMATION

COVERAGE RECIPIENT CONTACT PERSON: Bobby Elmore
 COMPANY NAME: Turkey Ridge Holdings, LLC
 STREET OR P.O. BOX: 1888 Main Street, Suite C #446
 CITY: Madison STATE: Mississippi ZIP: 39110
 PHONE NUMBER : (601) 966-5589 EMAIL ADDRESS: bobby@getontrax.com

PROJECT INFORMATION

FORMER ACREAGE: 660 ADDITIONAL ACREAGE TO BE DISTURBED: Approx. 182
 TOTAL ACREAGE: 842 MINE NAME: R22
 GEOLOGY APPLICATION/PERMIT NO. 21-015 CITY: Canton COUNTY: Madison

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

[Signature]
Signature (must be signed by coverage recipient)

11/3/2025
Date

Bobby Elmore
Printed Name

Member / Manager
Title

Please submit this form to:

Chief, Environmental Permits Division
 MS Department of Environmental Quality, Office of Pollution Control
 P.O. Box 2261
 Jackson, Mississippi 39225

OC

MINING STORM WATER GENERAL PERMIT STORM WATER POLLUTION PREVENTION PLAN

Turkey Ridge Holdings, LLC
Highway 22, Madison County, MS
Rev. June 2024 (Major Mod.)
Rev. November 2025 (Major Mod.)

Prepared by:



917 Marquette Road
Brandon, MS 39042
(601) 824-1860

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WORKSHEET 1: MATERIALS EXPOSED TO STORM WATER

WORKSHEET 2: LIST OF SIGNIFICANT SPILLS AND LEAKS

WORKSHEET 3: MONTHLY INSPECTION FORM

WORKSHEET 4: ANNUAL INSPECTION FORM

WORKSHEET 5: NOTICE OF TERMINATION FORM

APPENDIX A

MINING NOTICE OF INTENT, NOTICE OF EXEMPT OPERATION FORM

MINING STORM WATER, DEWATERING, AND NO DISCHARGE GENERAL PERMIT

APPENDIX B

FIGURES AND EROSION CONTROL DRAWINGS

APPENDIX C

RECORDS OF MONTHLY INSPECTIONS

APPENDIX D

RECORDS OF ANNUAL TRAINING

APPENDIX E

RECORDS OF SIGNIFICANT SPILLS AND LEAKS & NOTIFICATIONS TO
AGENCIES

APPENDIX F

WETLANDS/SECTION 404 DOCUMENTATION

ABOUT THIS PLAN

The Mississippi Department of Environmental Quality (MDEQ) regulations require this type of facility and operations to have a storm water general permit for mining operations. The permit has several requirements, the principle one being development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). FC&E Engineering, LLC (FC&E) has prepared this SWPPP to help your facility comply with the Mining Storm Water, Dewatering, and No Discharge General Permit for Surface Mining Activities issued by the Mississippi Department of Environmental Quality (MDEQ).

The intent of the Plan is to minimize storm water pollution from your facility during mining activities associated with your facility. The Plan specifies the procedures your staff will follow and the engineering controls your facility will implement to prevent or minimize storm water from coming in contact with potential pollutants, or to contain storm water that does come in contact with potential pollutants. Your permit requires that you comply with this Plan. Items that need your immediate attention include:

1. Coverage under the Mining Storm Water, Dewatering, and No Discharge General Permit is authorized by the MDEQ for mining storm water and dewatering discharges and operation of wastewater recirculation systems with no discharge. **The updated SWPPP and the Notice of Intent should be submitted to the Environmental Permits Division of the MDEQ.**
2. The completed SWPPP is to be kept on site and utilized by you to ensure that storm water leaving the site is uncontaminated. A copy of the permit and the Notice of Intent are included in **Appendix A**. This SWPPP has been written in consideration of the requirements of this general permit.
3. **Section 8.0** of this Plan describes the Monthly Site Inspections that must be conducted by the Site Manager (or someone designated by the Site Manager). This section also describes the required information to be included on the inspection form. **Worksheet 3** contains the required Inspection and Certification Form for mining activities requiring erosion and sediment controls. Completed inspections using **Worksheet 3** should be

stored in **Appendix C**. In addition, the Annual Storm Water Site Inspection Report Summary Form must be kept on site with the monthly Inspection and Certification Forms.

4. Based on the results of each inspection, the control measures and practices will be revised (if appropriate) immediately following the inspection or prior to additional mining activity taking place. In addition, if the inspection report lists changes at the facility that have a significant effect on the potential for the discharge of pollutants to surface waters, the SWPPP will be amended.
5. A copy of MDEQ's *Handbook for Erosion Control, Sediment Control and Stormwater Management on Construction Sites and Urban Areas; Volume 1; Erosion and Sediment Control Practices* can be accessed on the internet via the following link for reference and use.

http://opcgis.deq.state.ms.us/Erosion_Stormwater_Manual_2ndEd/Volume1/Volume_1.pdf

Specific BMPs referenced herein are based on the guidelines of this handbook.

6. Within 30 days of final reclamation and completion of the project, **a completed Notice of Termination (NOT) form, Worksheet 5, must be submitted for the termination of permit coverage**. Upon receiving the completed NOT form, the MDEQ staff will inspect the site. If no sediment and erosion control problems are identified and adequate permanent controls are established, the owner or operator will receive a termination letter. Coverage is not terminated until done so in writing by MDEQ.

SITE INFORMATION

Name and Address of the Site:

Turkey Ridge Holdings, LLC

Highway 22 and Richton Road

Madison County

Telephone No.: (601) 300-8729

Facility Contact: Bobby Elmore, Owner/Operator

County: Madison Latitude: 32° 57' 33" N Longitude: 90° 38' 30" W

Drainage Basin: Unnamed Tributaries of Panther Creek

Name and Address of the Owner/Operator:

Bobby Elmore

1888 Main Street, Suite C. #446

Madison, MS 39110 Telephone No.: (601) 300-8729

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Name: Bobby Elmore

Signature: _____

Title: Owner/Operator

Certification Date: _____

POLLUTION PREVENTION TEAM

Name: Bobby Elmore

Phone: (601) 300-8729

Responsibilities: Mr. Elmore is responsible for storm water pollution prevention activities at the facility. His role as leader of the Pollution Prevention Team includes the following responsibilities:

- (a) Updating the SWPPP as required
- (b) Performing monthly inspections of the facility
- (c) Ensuring that storm water pollution prevention is included in employee training classes
- (d) Supervising spill and leak cleanup
- (e) Supervising facility and procedural changes identified to minimize pollutant exposure to storm water
- (f) Communicating with regulatory agencies as needed

Name & Title: Bobby Elmore, Owner/Operator

Phone: (601) 300-8729

Responsibilities: Mr. Elmore is the responsible official for the facility. He is responsible for supporting the storm water management team by providing adequate resources to complete the activities identified in the SWPPP. He is also required to sign legal certification as identified in the SWPPP.

1.0 FACILITY INFORMATION

1.1 Site Description and Activities

Turkey Ridge Holdings, LLC and their Richton 22 Mine is an existing and previously permitted 660-acre surface mine (phase 1 & phase 2) located near the intersection of Highway 22 and Richton Road in Madison County, Mississippi (MS). The SWPPP for the original 330 acre mine was expanded through permitting in 2024 to add 330 acres for a total mining area of 660 acres (phase 1 & phase 2). This SWPPP is revised to address a new phase 3 expansion of the existing 660 acre Richton 22 Mine by an additional approximately 182 acres with the expanded mining area being east and generally adjacent to 660 acre mine (see **Figure 1B** showing expansion area/all phases). The R22 site is located in Section 33, Township 7 North, Range 4 West. The existing and expanded mine are accessed by entrances off Richton Road and Highway 22. The primary purpose of the full surface mine is the removal and transport of construction fill dirt material for off-site second party use. All surface mining is conducted by excavation. No dredging will be conducted. In addition, no washing operations will be located on site. The frequency of mining operations is based on customer demand. The primary Standard Industrial Classification (SIC) Code for the operation is 1499.

The USGS Quad Map, showing the property and permit boundary of the existing and new mine expansion is included as a new **Figure 1B – Site Location Topographic Map**. The Site Layout Map, showing site drainage and other details is included as original **Figure 2**(existing), **Figure 3A** (2024 expansion), and A new **Figure 3B**. The Stream Buffer Map for existing mine, showing the buffers around streams and the avoidance of wetlands, is included as original **Figure 3** for the existing mine. A map of the new expansion mine showing buffers to property lines and other required buffers is included as new **Figure 2B – Site Location Aerial Map**. Stormwater controls for the existing mine site are shown on the included original **Figure 4 – BMP Map** and **Figure 4B** BMP Map. Stormwater controls for the new expansion mine area are shown on the included new **Figure 4B – Site BMP Map**. All figures are within **Appendix B**.

The mailing address for the operation is:

1888 Main Street, Suite C. #466

1.2 Facility Drainage

All of the storm water contacting the existing phase 1 mine site drains either in a northerly or southerly direction as there is a mild sloped ridge spanning the length of the mine site from west to east. Storm water flows into unnamed ditches or tributaries of Panther Creek. The Phase 2 mine site has about half of the property draining to the north and the southern half draining to the south. The new Phase 3 mine site generally drains north and northwest.

All stormwater flows can be seen on the Site Layout Map and Site Drainage Maps. See original **Figure 2** - Site Layout Map (phase 1), **Figure 3A** – Site Drainage Map (phase 2), and a new **Figure 3B** – Site Drainage Map for the phase 3 mining area.

2.0 INVENTORY OF EXPOSED MATERIALS

Worksheet 1 contains a detailed inventory of materials used, stored, or produced onsite that are exposed to storm water.

3.0 SIGNIFICANT SPILLS AND LEAKS

There have been no significant spills or leaks exposed to storm water over the last three (3) years. **Worksheet 2** is included so the facility will have a ready mechanism to record information on any spill exposed to storm water that may occur during the period of the permit. Completed **Worksheet 2's** will be stored in **Appendix E**.

4.0 EROSION AND SEDIMENT CONTROLS

During ongoing surface mining operations, the ground will be disturbed and exposed. As such, the opportunity for storm water to create sediment runoff is likely unless measures are incorporated and implemented to ensure proper sediment control is in place. Site specific controls appropriate for the activities will be implemented by Turkey Ridge and are identified

on the original phase 1 **Figure 2** - Site Layout Map, the original phase 1 **Figure 4** – Site BMP Map. For phase 2 see **Figure 3A** - Site Drainage Map and **Figure 4A** – Site BMP Map. For the phase 3 expansion see new **Figure 3B** – Site Drainage Map and new **Figure 4B** – Site BMP Map.

Erosion Control Drawings are found in **Appendix B**. Turkey Ridge will control sediment erosion during the mining activities. The planned control activities include:

- A. Silt fencing and/or hay bales will be installed as needed down gradient from disturbed areas to control sediment resulting from mining activities. If necessary, hay bales will be staked in critical areas to reinforce the silt fencing. Silt fencing should be routinely inspected for proper installation and operation. Once sediment builds up to approximately one third to one half of the height of silt fencing, then sediment should be removed, and silt fencing replaced as needed.
- B. After the mining is complete, all exposed areas will be seeded with grass and/or mulched. When a disturbed area not being actively mined will be left undisturbed for 30 days or more, the appropriate temporary or permanent vegetative practices shall be implemented within seven (7) calendar days.
- C. Activities will be controlled and monitored to minimize the impact of heavy equipment which will be operating in the area during mining. Any temporary fuel tanks or other bulk liquids will be stored in a diked area to control spillage. Turkey Ridge will advise its employees/contractors to perform any equipment maintenance in a manner that will not lead to spillage of fuel, oil, antifreeze, etc.
- D. Rock check dams may be utilized as necessary at points of concentrated flow. Rock check dams should be routinely inspected for proper operation and capacity. Once sediment builds up to approximately one half of the height of check dams, then sediment should be removed.
- E. The original phase 1 SWPPP has two (2) storm water ponds planned for construction as sedimentation basins to collect runoff from the respective drainage areas. The phase 2 SWPPP has five (5) storm water ponds planned for construction as sedimentation basins for the mining area and is illustrated in **Figure 3A** – Site Drainage Map. The phase 3 expansion mine has four

(4) storm water ponds planned for construction. See the attendant Tables labeled **Drainage Areas & Sedimentation Basin Storage**

The ponds are designed to hold at least 3600 cubic feet of runoff per acre of the drainage area served. Accumulated sediment shall be removed when the capacity has been reduced by 50%. All removed sediment deposits shall be properly controlled. Sediment basins will be constructed with outlet structures that withdraw water from the surface in order to discharge treated storm water at the defined storm water outfall locations.

See **Tables 4A and 4B** labeled “**Drainage Areas & Sedimentation Basin Storage**” for drainage areas and sediment Basin details for mining areas.

At a minimum, the controls will be designed, installed and maintained to:

- Control storm water volume and velocity within the site to minimize soil erosion;
- Control storm water discharges, including both peak flow rates and total storm water volume, to minimize erosion at outlets and to minimize downstream channel and stream bank erosion;
- Minimize the amount of soil exposed during mining;
- Minimize the disturbance of steep slopes;
- Minimize the sediment discharges from the site;
- Provide and maintain natural buffers around surface waters;
- All wetlands will be avoided and will not be impacted by surface mining;
- Maintain a 25 foot buffer from ephemeral streams for surface mining;
- Maintain a 50 foot buffer from intermittent streams for surface mining;
- Maintain a 150 foot buffer from perennial streams for surface mining;
- Minimize soil compaction and, unless infeasible, preserve topsoil;
- Direct storm water to vegetated areas, silt fences, hay bales, etc. to aid in filtration, infiltration, velocity reduction and diffusion of the discharge;
- Transport runoff down steep slopes through lined channels or piping;
- Minimize off-site vehicle tracking of sediments.

4.1 Vegetative Practices

All disturbed areas will be managed and re-vegetated as soon as practicable upon completion of regular mining activities. Where applicable, disturbed areas will be stabilized by temporary seeding, permanent seeding, mulching and/or maintaining vegetative buffer strips as each case dictates. When a disturbed area will be left for thirty (30) days or more, the appropriate temporary or permanent vegetative practices shall be implemented.

4.2 Structural Practices

Structural erosion control measures shall be implemented as needed. The structural practices shall divert flows from exposed soils, store flows or otherwise limit runoff from exposed areas. The structural methods will include:

- A. Silt fencing will be installed as needed downgradient from all disturbed areas to control sediment resulting from surface mining activities. If necessary, hay bales will be staked in critical areas to reinforce the silt fencing.
- B. Activities will be controlled and monitored to minimize the impacts of heavy equipment which will be operating in the area during mining. Any temporary fuel tanks or other bulk liquids will be stored in a diked area to control spillage. Turkey Ridge will advise its employees/contractors to perform any equipment maintenance in a manner that will not lead to spillage of fuel, oil, antifreeze, etc.
- C. Non-functioning controls shall be repaired, replaced or supplemented with functional controls within 24-hours of discovery or as soon as field conditions allow. Turkey Ridge will also be required to remove any excessive buildup of sediment from each silt fence, hay dike or sediment trap. Accumulated sediment shall be removed from structural controls when sediment deposits reach one-third the height of the control. All removed sediment deposits shall be properly disposed.

The controls will, to the extent practicable:

- Divert upslope surface water around disturbed areas by means of diversion dikes;

- Limit exposure of disturbed areas to the shortest practical time;
- Minimize the amount of disturbed area at any given time;
- Implement best management practices to mitigate adverse impacts from storm water runoff;
- Slow rainfall runoff velocities to prevent erosive flows;

5.0 NON-STORM WATER DISCHARGES

Provided they do not cause or contribute to a violation of water quality standards, the following are considered allowable non-storm water discharges from mining activities occurring on the Turkey Ridge facility:

- Discharges from actual fire-fighting activities;
- Water used to control dust;
- Potable water sources including uncontaminated water line flushing;
- Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used;
- Uncontaminated air conditioning or compressor condensate;
- Uncontaminated ground water or spring water;
- Uncontaminated excavation dewatering;
- Landscape irrigation;
- Water used to wash vehicles, wheel wash water and other wash waters where detergents are not used.

The above non-storm water discharges should be eliminated or reduced to the extent feasible and controlled with an appropriate best management practice (BMP). The existing and proposed BMPs are listed in **Worksheet 1**.

6.0 IMPLEMENTATION OF CONTROLS

Controls shall be placed to minimize off-site vehicle tracking of sediments. Controls shall be implemented as needed to prevent adverse impact to receiving streams. When work is not being performed in a disturbed area, appropriate temporary and/or vegetative and structural practices shall be initiated.

Erosion and sedimentation control measures may include, but are not limited to, surface roughening, temporary seeding, permanent seeding, mulching, sod stabilization, vegetative buffer strips, earth dikes, brush barriers, drainage swales, check dams, silt fences and rock outlet protection.

Implementation scheduled as follows:

1. The full surface mine is broken into five (5) individual mining areas. Therefore, this implementation schedule will be followed for each of the sequenced individual mining areas.
2. Install BMPs (downgradient perimeter silt fence and construction entrance/exit) prior to any ground disturbing activities (sequenced mining areas throughout the project).
3. Following installation of BMPs, clearing and grubbing will take place for the mining area.
4. Vegetation will be removed and top soil will be segregated for final reclamation.
5. Begin surface mining operations. Mined material will not need to be stockpiled. Mined material will be dug as needed and loaded directly onto haul trucks.
6. Upon completion of mining operations, the area will be graded flat or gently sloped with segregated topsoil to allow for sheet flow drainage off the site, and the area will be seeded with appropriate grass for reclamation.
7. Perimeter silt fence will remain in place for each mining area and maintained until final reclamation is achieved and vegetation is reestablished.

8. Upon completion of final reclamation, BMPs will be removed.

Turkey Ridge Holdings, LLC will also:

- Implement the site-specific controls to effectively manage storm water for the area to be disturbed. A copy of the site-specific SWPPP must be retained on site;
- Implement the following pre-mining activities:
 - Delineate and clearly mark any areas such as steep slopes, highly erodible soils or other sensitive areas; and
 - Preserve native topsoil on the site to the extent feasible.
- Amend the SWPPP if notified at any time by the Executive Director of the MDEQ that the SWPPP does not meet the minimum requirements. Unless otherwise provided, the necessary changes will be made within fifteen (15) days. Turkey Ridge will certify in writing to the Executive Director that the necessary changes have been made;
- Amend the SWPPP whenever there is a change in design, mining, operation, or maintenance which may potentially affect the discharge of pollutants to waters of the State; or the SWPPP proves ineffective in controlling storm water pollutants;
- Install needed erosion controls even if they may be located in the way of subsequent activities;
- Install additional and/or alternative erosion and sediment controls when existing controls prove to be ineffective in preventing sediment from leaving the site;
- Comply with applicable State or local waste disposal, sanitary sewer or septic regulations; and
- Erosion and sediment controls shall be maintained at all times. Accumulated sediment will be removed from structural controls when sediment deposits reach one-third the height of the control. All removed sediment deposits will be properly disposed. Non-functioning controls shall be repaired, replaced or supplemented with functional controls within 24-hours of discovery or as soon as field conditions allow.

7.0 BEST MANAGEMENT PRACTICES

Best management practices (BMPs) are measures taken at the facility to prevent or mitigate water pollution from mining activities. BMPs are broad ranging and may include processes, procedures, human actions, or construction. BMPs are aimed at preventing contamination of storm water by mining activities and/or spills and similar environmental incidents by stressing the importance of management and employee awareness of potential spill situations.

The following subsections describe BMPs that are to be included in the facility's SWPPP. These BMPs follow the guidelines described in the MDEQ's *Handbook for Erosion Control, Sediment Control and Storm Water Management on Construction Sites and Urban Areas; Volume 1; Erosion and Sediment Control Practices* which can be accessed on the internet via the following link.

http://opcgis.deq.state.ms.us/Erosion_Stormwater_Manual_2ndEd/Volume1/Volume_1.pdf

7.1 Good Housekeeping Measures and Controls

Good housekeeping practices are designed to maintain a clean and orderly work environment and to prevent pollutants from entering storm water from mining sites. At this facility, the following types of good housekeeping measures should be implemented in an effort to prevent pollutants from entering storm water discharges.

Material Storage Practices

- Provide protected storage area for chemicals, paints, solvents, fertilizers, pesticides, herbicides, detergents and other potentially toxic materials. Adequate aisle space should be provided to facilitate material transfer and easy access for inspections.
- Containers, drums, and bags of material should be stored away from direct traffic routes to prevent accidental spills.
- Containers should be stacked according to manufacturers' instructions.

- Implement spill and leak prevention practices and response procedures if spills and leaks do occur.
- Minimize the exposure of building materials, building products, mining wastes, trash and landscape materials.
- As appropriate, containers should be stored on pallets to prevent corrosion.

Material Inventory Procedures

- An up-to-date inventory of hazardous and non-hazardous materials should be kept at the facility office.
- Containers are labeled with the name of the material, expiration date, and health hazards, as required.
- Storage areas with hazardous materials have been specifically designed to contain spills, as required.

Employee Participation

- Information on best management practices is discussed during employee training sessions.
- Good housekeeping measures are discussed at employee meetings.

Operation and Maintenance

- Garbage materials are regularly picked up and properly disposed.
- Designate and maintain areas for equipment maintenance and repair (may be off-site).
- Floors and ground surfaces should be kept clean by using brooms, shovels, or cleaning machines.
- Provide waste receptacles and regular collection of waste. Garbage, litter and waste materials should be regularly picked up and properly disposed.
- Remove any spillage promptly. Where it is impractical to constantly remove spillage, spillage should be contained in the immediate area temporarily until further removal can take place.

- Inspect equipment routinely to make sure it is in working order and no leaks are occurring.
- Communicate the importance of spill cleanup procedures to employees.

Sanitary Services

The existing mine has a combination of an office with a restroom and portable restrooms. The expanded mine site will have sanitary service using one portable restroom in a central location near loading/ticketing area.

7.2 Preventive Maintenance and Inspection

The preventive maintenance and inspection program include:

- Timely inspections and maintenance of storm water controls.
- Proper maintenance of facility equipment and systems.

7.3 Spill Prevention and Response Procedures

Very limited amounts of oil and/or chemical products are anticipated to be stored onsite during mining activities but should be below the 1,320-gallon threshold requiring compliance with the SPCC regulations during mining. This SWPPP will address some spill prevention and response issues for the mining phase of this project. In the event of a spill, employees are instructed to make every effort to contain the release, notify the SWPPP Coordinator and prevent any release from leaving the facility site. It will be the SWPPP Coordinator's responsibility to determine if the spill needs to be reported to the regulatory authorities. Records of significant spills and leaks and notifications to the appropriate agencies will be stored in **Appendix E**.

Additional preventative measures utilized by the site are: 1) proper storage and disposal of used batteries; 2) proper labeling of drums containing used oil and ensuring that stored drums are kept inside buildings and away from potential accidental tippage situations; 3) maintaining accurate labels and inventories of chemical materials, solvents, paints, lubricants etc.; and 4) storage of solvents and flammable materials in a proper and safe manner.

Likely Releases and In-place Preventative Controls:

Spills and releases are most likely to result from potential equipment failure or operator error. This section summarizes potential causes of releases and associated in-place preventative controls.

1. Operator error during loading/unloading or refueling operations. Potential errors include overfilling, not disconnecting lines prior to vehicle departure, drain valves left open, or fill valves left open allowing precipitation to enter and cause tank overflow. Specific procedures have been developed to minimize this potential and include regular periodic inspections, locking valves when not in use, and on-the-job training in correct procedures.
2. Piping, pressure fittings, tank ruptures, or other forms of equipment failure. The rate and quantity of a release would depend on the location of the rupture. Release rate could be assumed to be the total volume of the tank associated with the piping or fittings being released in a 15-minute timeframe. The release to the environment would be at that rate but the quantity would be the total volume minus the secondary containment volume. To minimize the potential for a significant release, regular inspections and maintenance are performed with noted problems addressed in a timely manner by repair, replacement, or equipment taken out of service.
3. Puncture of tank or associated piping by heavy equipment. Operators of equipment and vehicles must be well trained in operating large equipment on the facility. Rate and quantity to be released would be the same as that discussed in item 2. Additionally, tanks and piping are highly visible by size, signage, flagging, or protective paint color. In the event of night traffic, sufficient lighting is provided to make tanks and piping visible.
4. Small drips, leaks and spills from lines or valves. Release rates would be negligible and are not likely to produce significant quantities or environmental impacts. To minimize release quantities, equipment is inspected regularly, repaired in a timely manner when a problem is discovered, and corrective action implemented with released material promptly cleaned up. In general, this type of release presents a very low risk of potential impact.

7.4 Employee Training

Turkey Ridge will train employees on the elements of this SWPPP plan. Turkey Ridge will periodically evaluate the effectiveness of the installed storm water pollution control measures. Following each periodic assessment, Turkey Ridge will evaluate the successes and failures of the storm water pollution control system at the site. Should an evaluation show additional measures are necessary to control runoff pollutants, Turkey Ridge will make additions of sediment control structures or other reasonable adjustments to the plan.

New employees receive initial training in storm water pollution prevention typically before they begin their work assignments at the mining site, however the required training shall be performed no later than 12 months of issuance or reissuance of coverage under this permit. Thereafter, periodic training is provided and storm water pollution prevention discussed as needed at the safety meetings that employees attend.

Training records should be maintained for at least three (3) years. Training records should include employee's name, worker identification number, contents of training, and the employee's signature acknowledging that training was received.

The training program addresses:

- Elements of the Storm Water Pollution Prevention Plan
- Spill prevention and response
- Good housekeeping
- Installation, maintenance and inspection of erosion and sediment controls BMP's.
- Record keeping and reporting

A brief description of each topic covered as part of the training program is outlined below.

Elements of the Storm Water Pollution Prevention Plan

Employees/contractors are instructed on each of the elements contained in this plan related to the management of storm water from mining activities.

Spill Prevention and Response

Limited amounts of oil and/or chemical products are anticipated to be stored onsite during mining. **Employees should be made aware to contact the Turkey Ridge SWPPP Coordinator in the event of a spill of oil or potentially hazardous chemicals.** Training involving spills are discussed briefly in **Section 7.3** above and as follows:

- Employees involved in the storm water pollution prevention program are shown the potential spill areas and drainage routes at the facility.
- Employees are given instructions on how to report spills and the appropriate individuals to contact.
- Proper material handling procedures and storage requirements are discussed.

Good Housekeeping

- Employees/contractors are instructed to promptly clean up spilled materials to prevent storm water from becoming contaminated.
- Locations of housekeeping and spill response equipment and supplies are provided to all employees. Turkey Ridge will be required to provide adequate housekeeping and spill response equipment to manage storm water for all areas under their supervision.
- Where appropriate, employees are provided instructions on the proper methods to secure drums and other containers. Those working near containers/drums are also instructed to routinely check the integrity of the containers to make sure there are no leaks.

8.0 MONTHLY SITE INSPECTIONS

Best management practices (BMPs) must be in place to control run off. Inspection of all receiving streams, erosion and sediment controls, and other SWPPP requirements shall be performed during permit coverage by qualified personnel. The SWPPP Site Manager or his designee will conduct a monthly site inspection and as often as necessary to ensure appropriate erosion and sediment controls have been properly constructed and maintained. Inspections

must also be conducted within 24 hours of a rainfall event equal to or greater than a 2-year, 24-hour storm event (approximately 5 inches). Non-functioning controls shall be repaired, replaced or supplemented with functional controls within 24-hours of discovery or as soon as field conditions allow. The purposes of the inspections are to:

1. Confirm the accuracy of the description of potential pollutant sources contained in the SWPPP.
2. Determine the effectiveness of the Plan and its BMPs for preventing storm water pollution due to mining activities.
3. Assess compliance with the terms and conditions of the General Permit and if necessary, implement new BMPs that will protect storm water runoff from polluting nearby streams.

During the evaluation, material handling and storage areas, mining activities, and other potential sources of pollution will be visually inspected for evidence of actual or potential pollutant discharges to the drainage system. Erosion controls and structural storm water management devices also will be inspected to ensure that each is operating correctly. **Worksheet 3** is provided to assist in the monthly inspections.

The results of each inspection will be documented on the form provided as **Worksheet 3** and signed by an authorized company official. The report will describe:

- Name and address of the person making the inspection;
- Date and time of the inspection; and
- Whether any deficiencies were noted. If deficiencies were noted, then list the corrective action taken.

Inspections must continue until the permit coverage has been terminated. Monthly inspection reports are to be stored in **Appendix C**. Based on the results of each inspection, the description of potential pollutant sources and measures and controls will be revised (if appropriate) immediately following the inspection or prior to additional mining activity taking place. In

addition, if the inspection report lists changes at the facility that have a significant effect on the potential for the discharge of pollutants to surface waters, the SWPPP will be amended.

9.0 RECORDS RETENTION

All records, reports, forms and information resulting from activities required by the General Permit shall be retained for a period of at least three (3) years from the date the document was generated.

10.0 TERMINATION OF PERMIT COVERAGE

A completed Request for Termination of Coverage Form will only be submitted to the MDEQ Permit Board if all mining operations are ceased with no future plans to resume mining operations. Coverage is not terminated until notified in writing by MDEQ.

Turkey Ridge Holdings, LLC – SWPPP
Madison County, MS

WORKSHEET 1: MATERIALS EXPOSED TO STORM WATER

Worksheet 1: Materials Exposed to Storm Water

Material: Dirt and soil from surface mining operations and site ground work.
Purpose: Mining activities.
Location: Majority of the site.
Quantity Used: Varies **Produced:** N/A **Stored:** N/A
Quantity Exposed to Storm Water in Past 3 Years: N/A
Past Significant Spill or Leak Exposed to Storm Water: N/A
If "Yes", Describe:
Method of Storage or Disposal: N/A
Description of Material Management Practice: Best management practices used for site work and surface mining. Silt fences used to stabilize soil prone to erosion only if applicable outside of mining area.

Material: Off-road diesel fuel, hydraulic oil, lubrication oil and motor oil.
Purpose: Fueling and maintenance of on-site heavy equipment.
Location: Throughout the mining area.
Quantity Used: Varies **Produced:** N/A **Stored:** Varies.
Quantity Exposed to Storm Water in Past 3 Years: N/A
Past Significant Spill or Leak Exposed to Storm Water: No
If "Yes", Describe:
Method of Storage or Disposal: Fueling Tanks (on trailers, pallets, etc.)
Description of Material Management Practice: Tanks are inspected routinely to ensure that no leaks are occurring; proper fueling techniques and training to ensure that overfilling and spills are minimized or avoided; proper cleanup and remediation as needed to cleanup spills before they can impact storm water. Secondary containment (or equivalent) should be used for diesel/oil storage.

Material: Heavy equipment (excavators, tractors, track hoes, bulldozers, skidders, dump trucks, etc.)
Purpose: Mining operations.
Location: Throughout the mining area.
Quantity Used: Equipment used as needed **Produced:** N/A
Stored: On-site and used as needed
Quantity Exposed to Storm Water in Past 3 Years: N/A.
Past Significant Spill or Leak Exposed to Storm Water: No
If "Yes", Describe:
Method of Storage or Disposal: N/A
Description of Material Management Practice: Heavy equipment is inspected routinely to check for leaking hoses or other areas of potential oil or fuel leaks. Equipment is maintained in a manner to minimize the contamination of storm water. Required periodic preventive maintenance is performed on all heavy equipment.

Turkey Ridge Holdings, LLC – SWPPP
Madison County, MS

WORKSHEET 2: LIST OF SIGNIFICANT SPILLS AND LEAKS

Turkey Ridge Holdings, LLC – SWPPP
Madison County, MS

Worksheet 2: List of Significant Spills and Leaks

Turkey Ridge Holdings, LLC Madison County, MS				Completed by: Title: Date:						
Directions: Record below all significant spills and significant leaks of chemicals, petroleum products, or toxic / hazardous pollutants that occur at the facility. Maintain these records for 3 years after this permit has terminated.										
Definitions: Significant spills include, but are not limited to, releases of oil that cause sheen on waters of the United States (offsite ponds, creeks, rivers, etc.), or the release of a Reportable Quantity of any chemical. Consult MSDS sheet for spill cleanup and chemical information.										
Date (m/d/y)	Check One or Both		Location (as indicated on site map)	Description				Response Procedure		Preventive Measures Taken
	Spill	Leak		Type of Material	Quantity (Estimate)	Source	Reason	Amount of Material Recovered	Is Material Still Exposed to Storm Water? (Yes or No)	

Worksheet 2 is provided for use in recording future spills. This form should be completed promptly after a spill has occurred to document the event and to provide information for future training topics. It is recommended that a monthly notation of “No spills have occurred during Month XX” be placed in **Worksheet 2** for any months in which no spills occur.

Turkey Ridge Holdings, LLC – SWPPP
Madison County, MS

WORKSHEET 3: MONTHLY INSPECTION FORM

Monthly Inspection Checklist

Turkey Ridge Holdings, LLC - Richton 22 Surface Mine		Inspector:		Date:		Page 1 of 2	
				N/A	Y	N	Comments / Corrective Action(s) / Date of Corrective Action(s) Completion
<i>Inspections. During coverage under this permit, all areas contributing to storm water discharges associated with industrial activity (including aboveground storage tanks, piping, containment/collection systems, truck wash down, and equipment cleaning areas) must be visually inspected as often as needed but no less than once monthly. The inspection must evaluate whether the SWPPP adequately minimizes pollutant loadings and is properly implemented in accordance with the terms of this permit or whether additional control measures are needed. This includes observing storm water discharges for obvious industrial storm water pollution such as color, lack of clarity, floating solids, settled solids, suspended solids, foam, and oil sheens. Description of corrective actions and date of when the corrective action is completed must be documented for all deficiencies noted during inspections.</i>							
SWPPP AREAS							
SW-1	Visual inspection. Are all potential areas contributing to storm water discharges associated with industrial activity identified?						
SW-2	Are aboveground storage tanks/maintenance area contributing to storm water pollution?						
SW-3	Is mobile machinery contributing to storm water pollution?						
SW-4	Are dry wood storage areas contributing to storm water pollution?						
SW-5	Is portable sawmill area contributing to storm water pollution?						
EROSION-PRONE AREAS							
ER-1	Are drainage pathways at the site free of evidence of soil erosion?						
ER-2	Are ditches and ponds onsite free of significant depths of sediment?						
ER-3	If sediment controls (for example, silt fences, rock rip rap, seeding, hay bales, etc.) are used onsite (check N/A if not), are they in good shape and operating properly?						
ER-4	Does all sediment remain onsite? If not, explain what erosion control measures could help prevent it from leaving the site.						
STORM WATER CONTROLS							
SW-1	Are inlets, pipes, ditches, and ponds (check N/A if none) free of excess sediment?						
SW-2	Are inlets, pipes, ditches, and ponds (check N/A if none) free of debris, raw materials, waste materials, oil sheen, and other possible contaminants?						
SW-3	If outfalls leaving property are flowing during dry weather (check N/A if none are flowing), is flow due to permitted non-storm water discharge? If not, describe source of flow (for example, groundwater, unpermitted non-storm water discharge, etc.).						
FACILITY EQUIPMENT <i>Visual Site Inspection. Identified personnel shall at least monthly inspect facility equipment and material handling areas for evidence of pollutants entering the drainage system and verify the description of potential pollutant sources and the implementation of management controls. Establish tracking or follow-up procedures for appropriate inspection response.</i>							
FE-1	Is facility equipment polluting the drainage system?						
FE-2	Are material handling areas polluting the drainage system? If so, describe.						
FE-3	Do you see any equipment, materials, or conditions that could potentially pollute storm water runoff? If so, describe.						
FE-4	Observe the last monthly inspection report. Were deficient items or conditions identified in the last inspection report corrected? If not, correct deficiency or condition						
PETROLEUM PRODUCT STORAGE TANKS							
TS-1	Are tanks free of excess rust or other signs of compromised tank integrity?						
TS-2	Are all pumps, valves, hoses, piping, etc., intact and operating properly?						
TS-3	Are all pumps and valves closed and/or locked when not in use?						

Monthly Inspection Checklist (Continued)

Turkey Ridge Holdings, LLC - Richton 22 Surface Mine		Inspector:		Date:		Page 2 of 2	
Item No.	Item	N/A	Y	N	Comments/Corrective Actions/Date of Corrective Action Completion		
DRUM & TOTE STORAGE AREAS							
DS-1	Are drums stored on pallets or racks above the ground surface?						
DS-2	Are all drums within a secondary containment system?						
DS-3	If some drums are not within secondary containment, are they fewer than 5 total and in active use in facility processes?						
DS-4	Are drums intact? If not, describe any leakage.						
DS-5	Are drums stacked or stored according to manufacturers' recommendations?						
DS-6	Are drums closed/sealed when not in use?						
DS-7	If secondary containment is used, then is the containment free of cracks, holes, or other breaches?						
DS-8	Are containment release valves closed and operating properly, if applicable?						
DS-9	Are storm water releases from the containment being properly documented, if applicable?						
DS-10	Is water in the containment (mark N/A if no water or no containment) free of any sheen?						
DS-11	Are the contents of each drum clearly labeled?						
BATTERY STORAGE AREA							
BS-1	Are batteries properly labeled including accumulation start date?						
BS-2	Are any batteries cracked/leaking?						
STORAGE AREAS EXPOSED TO STORM WATER							
SA-1	Are stored materials prevented from reaching inlets, pipes, ditches, or ponds?						
SA-2	Are storm water controls in good shape and operating properly? (for example, silt fences, hay bales, screens over inlets and culverts, etc.)						
LOADING/UNLOADING AREAS							
LU-1	Do previous spills in the areas appear to have been adequately addressed? If not, describe and list the outfalls that the areas drain to.						
LU-2	Is the area free of raw materials, waste materials, debris, and dust?						
LU-3	Are standard loading/unloading procedures prominently posted in the areas?						
LU-4	If there is a local drain (check N/A if none), is it free from obstructions?						
DRINKING WATER							
DW-1	Is the drinking water free of any unusual taste, odor, or color?						
SPILLS OCCURRED							
SO-1	Have any spills occurred?						
SO-2	Have spills been adequately addressed and recorded?						
Note: N/A = Not Applicable							

Turkey Ridge Holdings, LLC – SWPPP
Madison County, MS

WORKSHEET 4: ANNUAL INSPECTION FORM

COVERAGE NUMBER (MSR32 _ _ _ _) INSPECTION YEAR _____
SITE INSPECTION REPORT AND CERTIFICATION FORM
MINING GENERAL PERMIT



Results of the inspection by ACT7 of this permit shall be recorded on this report form and in addition, copies of all completed forms shall be retained onsite or locally available. Inspections must be performed monthly and after a 2-year, 24-hour storm event (approx. 6-inches on Gulf Coast to 4-inches at MS/TN State Line). The coverage number must be listed at the top of all Site Inspection Report and Certification Forms.

COVERAGE RECIPIENT INFORMATION

COMPANY NAME: _____	MINE NAME: _____
MINE LOCATION: _____	GEOLOGY APPLICATION/PERMIT NO. _____
NEAREST PROJECT CITY: _____	COUNTY: _____
MAILING ADDRESS: _____	
MAILING CITY: _____	STATE: _____ ZIP: _____
CONTACT PERSON: _____	CONTACT PHONE NUMBER: _____

INSPECTION DOCUMENTATION

DATE (mm/dd/yy)	TIME (hh:mm AM/PM)	AFTER 2-YEAR, 24-HOUR STORM EVENT? (CHECK IF YES)	ANY DEFICIENCIES? (CHECK IF YES)	INSPECTOR(S)
		☐	☐	
		☐	☐	
		☐	☐	
		☐	☐	
		☐	☐	
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		☐	☐	
		☐	☐	

Deficiencies Noted During any Inspection (give date(s); attach additional sheets if necessary): _____

Corrective Action Taken or Planned (give date(s); attach additional sheets if necessary): _____

Based upon this inspection which I or personnel under my direct supervision conducted, I certify that all erosion and sediment controls have been implemented and maintained, except for those deficiencies noted above, in accordance with the Storm Water Pollution Prevention Plan filed with the Office of Pollution Control and sound engineering practices as required by the above referenced permit. I further certify that the MNOI and SWPPP information on file with MDEQ is up to date.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Authorized Signature

Date

Printed Name

Title

Turkey Ridge Holdings, LLC – SWPPP
Madison County, MS

WORKSHEET 5: NOTICE OF TERMINATION FORM

Request for Termination (RFT) of Coverage

Mining General NPDES Permit No. MSR32 _____ County _____
(Fill in your Certificate of Coverage Number and County)



Use this form to request coverage termination only after mining activities have permanently stopped and permanent erosion and sediment controls are successfully established. Inspections must continue until the coverage recipient receives written notice of coverage termination by MDEQ.

Please check which of the following apply:

- ☐ Non-Exempt Mining Operation (copy of Permit Board Order, authorizing 90% or final release of mining performance bond attached)
- ☐ Exempt Mining Operation (as defined in MDEQ's Mississippi Surface Mining and Reclamation Rules and Regulations)

(Please Print or Type)

Facility Name: _____ Closure Date: _____

Physical Site Street Address (if not available, indicate nearest named road): _____

City: _____ County: _____

Landowner Company Name: _____

Landowner Company Contact Name and Position: _____

Street Address / P.O. Box: _____

City: _____ State: _____ Zip: _____

Tel. # (____) _____

Operator Company Name (if different than owner): _____

Operator Contact Name and Position: _____

Street/ Address / P.O. Box: _____

City: _____ State: _____ Zip: _____

Tel. # (____) _____

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations. I understand that by submitting this Request for Termination and receiving written confirmation, I will no longer be authorized to discharge storm water associated with industrial activity under this general permit. Discharging pollutants in storm water associated with industrial activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this Request for Termination does not release an owner or operator from liability for any violations of this permit or the Clean Water Act.

Authorized Name (Print) Telephone Signature Date Signed

¹This application shall be signed according to the General Permit, ACT 15, T-4 as follows:

- For a corporation, by a responsible corporate officer.
- For a partnership, by a general partner.
- For a sole proprietorship, by the proprietor.
- For a municipal, state or other public facility, by principal executive officer, mayor, or ranking elected official.

After signing please mail to: Environmental Permits Division, Office of Pollution Control
P.O. Box 2261
Jackson, MS 39225

Revision: 2/16/2018

Turkey Ridge Holdings, LLC – SWPPP
Madison County, MS

APPENDIX A
Notice of Intent (original)



MISSISSIPPI DEPARTMENT OF
ENVIRONMENTAL QUALITY

**MINING NOTICE OF INTENT (MNOI)
FOR COVERAGE UNDER
MINING STORM WATER, DEWATERING AND NO DISCHARGE
GENERAL PERMIT MSR32 _____
(Number to be assigned by State)**

File at least 30 days prior to the commencement of mining; 15 days if a Storm Water Pollution Prevention Plan (SWPPP) is already on file and mine dewatering is not proposed. Lateral expansion of an existing mine that has general permit coverage requires the submittal of the Major Modification Form, not a new MNOI. However, modification of the existing SWPPP to include the expansion is required. Discharge of storm water or impounded water associated with mining or the operation of a wastewater recirculation system with no discharge without written notification of coverage from MDEQ is a violation of State Law.

If the company seeking coverage is a corporation, a limited liability company, a partnership, or a business trust, attach proof of its registration with the Mississippi Secretary of State and/or its Certificate of Good Standing. This registration or Certificate of Good Standing must be dated within twelve (12) months of the date of the submittal of this coverage form. Coverage will be issued in the company name as it is registered with the Mississippi Secretary of State.

Please indicate the activities to be covered by this MNOI (check all that apply).

- ☒ Storm Water Discharges Associated with Mining ☐ Mine Dewatering
☐ Wastewater Recirculation System with No Discharge

The appropriate section of the MNOI must be completed if the applicant proposes to discharge storm water, discharge impounded mine water (dewatering) and/or operate a wastewater recirculation system with no discharge.

A site-specific Storm Water Pollution Prevention Plan (SWPPP) developed in accordance with ACT5 of the General Permit and a United States Geological Survey (USGS) quadrangle map or photocopy, indicating the site location and outfalls must be included with the MNOI submittal. The name of the quadrangle map must be shown on all copies. Quadrangle maps can be obtained from the MDEQ, Office of Geology at 601-961-5523. Additional submittals may include the following (check all that apply).

- ☐ Section 404 Documentation ☒ Notice of Exempt Operations Form
☐ Dam/Reservoir Safety Permit or Written Authorization

ALL INFORMATION MUST BE COMPLETED (indicate "N/A" where not applicable)

MSR32 _ _ _ _

(NUMBER TO BE ASSIGNED BY STATE)

APPLICANT IS THE: ☒ OWNER ☐ OPERATOR

OWNER CONTACT INFORMATION

OWNER CONTACT PERSON: Bobby Elmore
OWNER COMPANY LEGAL NAME: Trax, LLC
OWNER STREET OR P. O. BOX: 167 Orchard Lane
OWNER CITY: Madison STATE: Mississippi ZIP: 39110
OWNER PHONE #: (601) 355-1555 OWNER EMAIL: rteprop@gmail.com

OPERATOR CONTACT INFORMATION

OPERATOR CONTACT PERSON: Bobby Elmore
OPERATOR COMPANY LEGAL NAME: Trax, LLC
OPERATOR STREET OR P. O. BOX: 167 Orchard Lane
OPERATOR CITY: Madison STATE: Mississippi ZIP: 39110
OPERATOR PHONE #: (601) 355-1555 OPERATOR EMAIL: rteprop@gmail.com

MINE INFORMATION

MINE NAME: Richton 22
MINE SITE ADDRESS (If the physical address is not available, please indicate nearest named road.)
Street: Highway 22 and Richton Road
City: Canton, MS State: Mississippi County: Madison Zip: 39110
— /4 OF NW1 /4 OF SECTION 1 , TOWNSHIP 8 North , RANGE 1 East
MINE SITE TRIBAL LAND ID (N/A If not applicable): N/A
ATTACH A USGS QUAD MAP, EXTENDING ½ MILE BEYOND FACILITY, OUTLINING THE MINE BOUNDARIES
(Maps can be obtained from the Mississippi Office of Geology. For information call 601-961-5523).
LATITUDE: 32 degrees 34 minutes 48 seconds LONGITUDE: 90 degrees 9 minutes 0 seconds
LAT & LONG DATA SOURCE (GPS (Please GPS Entrance Gate) or Map Interpolation): Interpolation
TOTAL ACREAGE: 4.0 MATERIAL TO BE MINED: Dirt
WILL HYDRAULIC DREDGING BE USED? ☐ YES ☒ NO
WASHING OF SAND/GRAVEL? ☐ YES ☒ NO

ESTIMATED START DATE: Mid to Late July 2021

ESTIMATED END DATE: TBD

YYYY-MM-DD

YYYY-MM-DD

SIC CODE 1442

NAICS CODE _____

RECEIVING STREAM INFORMATION

NEAREST NAMED RECEIVING STREAM: _____

IS RECEIVING STREAM ON MISSISSIPPI'S 303(D) LIST OF IMPAIRED WATER BODIES? (The 303(d) list of impaired waters and TMDL stream segments may be found of MDEQ's website: http://www.deq.state.ms.us/MDEQ.nsf/page/TWB_Total_Maximum_Daily_Load_Section) ☐ YES ☒ NO

HAS A TMDL BEEN ESTABLISHED FOR THE RECEIVING STREAM SEGMENT? ☐ YES ☒ NO

COMPLETE IF STORM WATER DISCHARGE IS PROPOSED

ATTACH A STORM WATER POLLUTION PREVENTION PLAN (SEE PERMIT FOR REQUIREMENTS)

IDENTIFY THE ASSOCIATION OR GENERIC SWPPP ON FILE AT MDEQ: N/A

COMPLETE IF WASTEWATER RECIRCULATION SYSTEM WITH NO DISCHARGE IS PROPOSED

DISTANCE BETWEEN RECIRCULATION POND(S) AND PROPERTY LINE: _____ (FT)
(MUST BE AT LEAST 150 FEET)

NUMBER OF RECIRCULATION POND(S): _____

STORAGE CAPACITY OF EACH RECIRCULATION POND(S): _____ (FT³)

COMPLETE IF MINE DEWATERING IS PROPOSED

ESTIMATED DEWATERING VOLUME: _____ (GAL/DAY)

NAME AND ADDRESS OF THE RECIPIENT OF THE DISCHARGE MONITORING REPORTS (DMRs), IF DIFFERENT FROM SIGNATORY: _____

DOCUMENTATION OF COMPLIANCE WITH OTHER REGULATIONS/REQUIREMENTS
Coverage under this general permit will not be granted until all other required MDEQ permits and approvals are addressed.

WILL THE CONSTRUCTION OR OPERATION OF THIS MINE INVOLVE THE RE-ROUTING, FILLING OR CROSSING OF A WATER CONVEYANCE OF ANY KIND? ☐ YES ☒ NO

If yes, contact the U.S. Army Corps of Engineers' Regulatory Branch for permitting requirements. If the mine requires a Corps of Engineers Section 404 permit, provide appropriate documentation with this MNOI that:

- The mine has been approved by individual permit, or
- The work will be covered by a nationwide permit and NO NOTIFICATION to the Corps is required, or
- The work will be covered by a nationwide or general permit and NOTIFICATION to the Corps is required.

LIST ANY NPDES PERMIT NO(s). _____ GEOLOGY APPLICATION/PERMIT NO. _____

LIST OTHER GEOLOGY PERMIT NUMBERS THAT APPLY TO COVERAGE AREA Notice of 4 acre Exempt Mine

IS THE MINE LESS THAN 4 ACRES AND GREATER THAN 1320 FEET FROM ANOTHER MINE?

- ☒ YES A "Notice of Exempt Operations" Form must be included with the MNOI or proof of prior submission, if previously submitted to the Office of Geology.
- ☐ NO A "Notice of Intent to Mine Class I or Class II Materials" Form must be filed before coverage will be granted under the Mining General Permit. For information on Office of Geology requirements, call 601-961-5515.

LIST ANY LOCAL STORM WATER ORDINANCES WITH WHICH THE OPERATIONS MUST COMPLY AND SUBMIT ANY ASSOCIATED APPROVAL DOCUMENTATION. _____

IF IMPOUNDMENTS WILL BE CONSTRUCTED ABOVE NATURAL SURFACE ELEVATIONS, INDICATE WHICH, IF ANY, OF THE FOLLOWING APPLY.

- ☐ The impoundment will be constructed with a peripheral dam or levee 8 feet or greater in height, measured from the lowest elevation of its toe.
- ☐ The impoundment will have a maximum storage volume greater than 25 acre-feet.
- ☐ The impoundment will impound a watercourse with a continuous flow.
- ☐ The impoundment has the potential to threaten downstream lives or man-made structures.

If any of the impoundments meet any of the above criteria, the applicant will be required to obtain written authorization from MDEQ, Dam Safety Division before coverage will be granted under the Mining General Permit.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Signature¹

Bobby Elmore

Printed Name

Date

Member/Manager

Title

¹This application shall be signed according to the General Permit, Act 15, T-4 as follows:

- For a corporation, by a responsible corporate officer.
- For a partnership, by a general partner.
- For a sole proprietorship, by the proprietor.
- For a municipal, state or other public facility, by either a principal executive officer, the mayor, or ranking elected official.
- Duly Authorized Representative

Please submit this form to: Chief, Environmental Permits Division
MDEQ, Office of Pollution Control
P.O. Box 2261
Jackson, Mississippi 39225

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF GEOLOGY
Mining and Reclamation Division
P. O. Box 2279
Jackson, Mississippi 39225-2279
(601) 961-5527

NOTICE OF EXEMPT OPERATION

This form shall be filed with the Office of Geology, Mining and Reclamation Division **only** for operations affecting 4 acres or less **and greater than 1320** feet from another mine. **NOTE:** Local, county, federal or other state agencies may also require permits before mining can be done on your site. This is *your* responsibility.

Name of applicant/operator: Bobby Elmore/Trax, LLC
Mailing address: 167 Orchard Lane
Madison, Mississippi 39110
Telephone number: (662) 315-1555

Do you have any **other** exempt mining operations on file? ☐ yes ☒ no
Do you plan to file for a **permit** and expand this site later? ☒ yes ☐ no

LOCATION

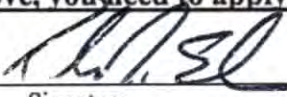
 1/4 of NW 1/4 of Section 1, Township 8N Range 1E County MADISON

Include a map or aerial photo marked with site location with this form.

Name of land owner: Turkey Ridge, LLC
Mailing address: 167 Orchard Lane
Madison, Mississippi 39110
Telephone number (662) 315-1555

Date operation to begin July 2021 Date operation to end (estimated) Jan. 1, 2022
Material to be mined Dirt Number of acres to be mined <4.0 (A)*
Total acres to be affected by operation (mine, roads, storage, etc.) <4.0 (B)*
Is operation **closer** than 1,320 feet (1/4 mile) to another mine? ☒ no ☐ yes (C*)
Is there a **Dam** present and/or one to be constructed onsite? ☒ no ☐ yes

***If items A or B exceed 4 acres or you answered YES to C above, you need to apply for a MINING PERMIT.**

Applicant/operator: Bobby Elmore By 
Signature

Date: 6/16/2021 Position Member/Manager

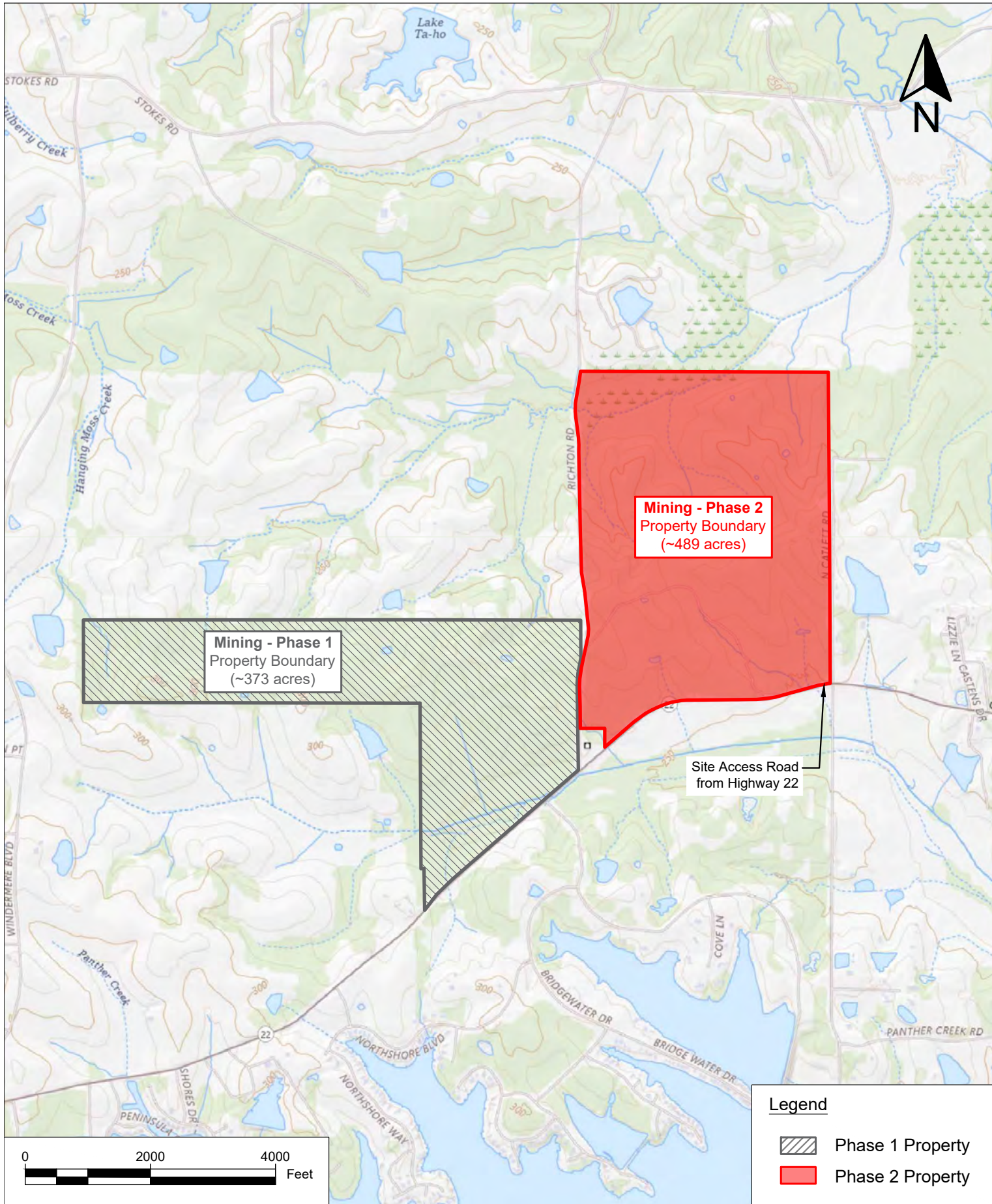
For Office of Geology use only

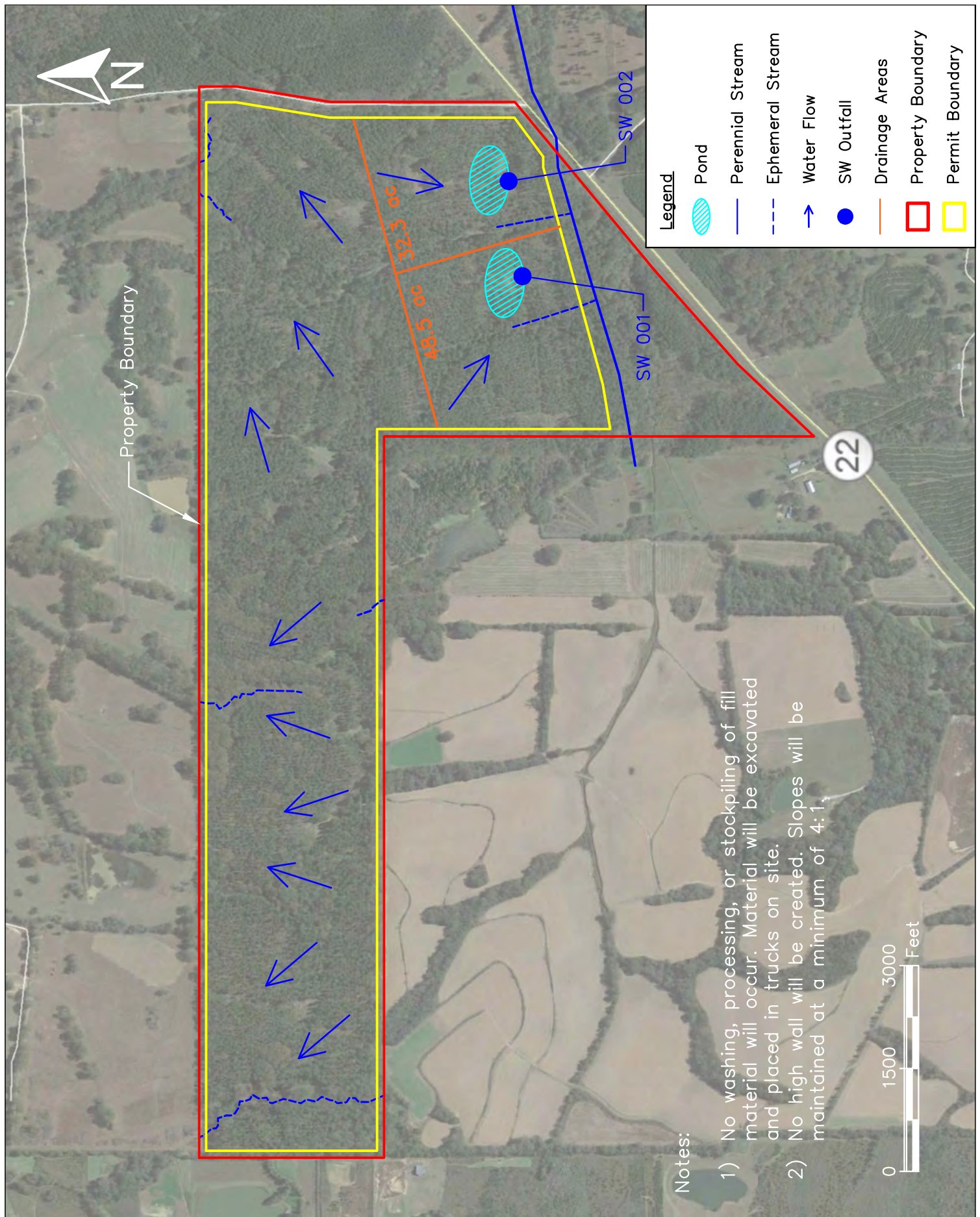
Date: _____ By _____

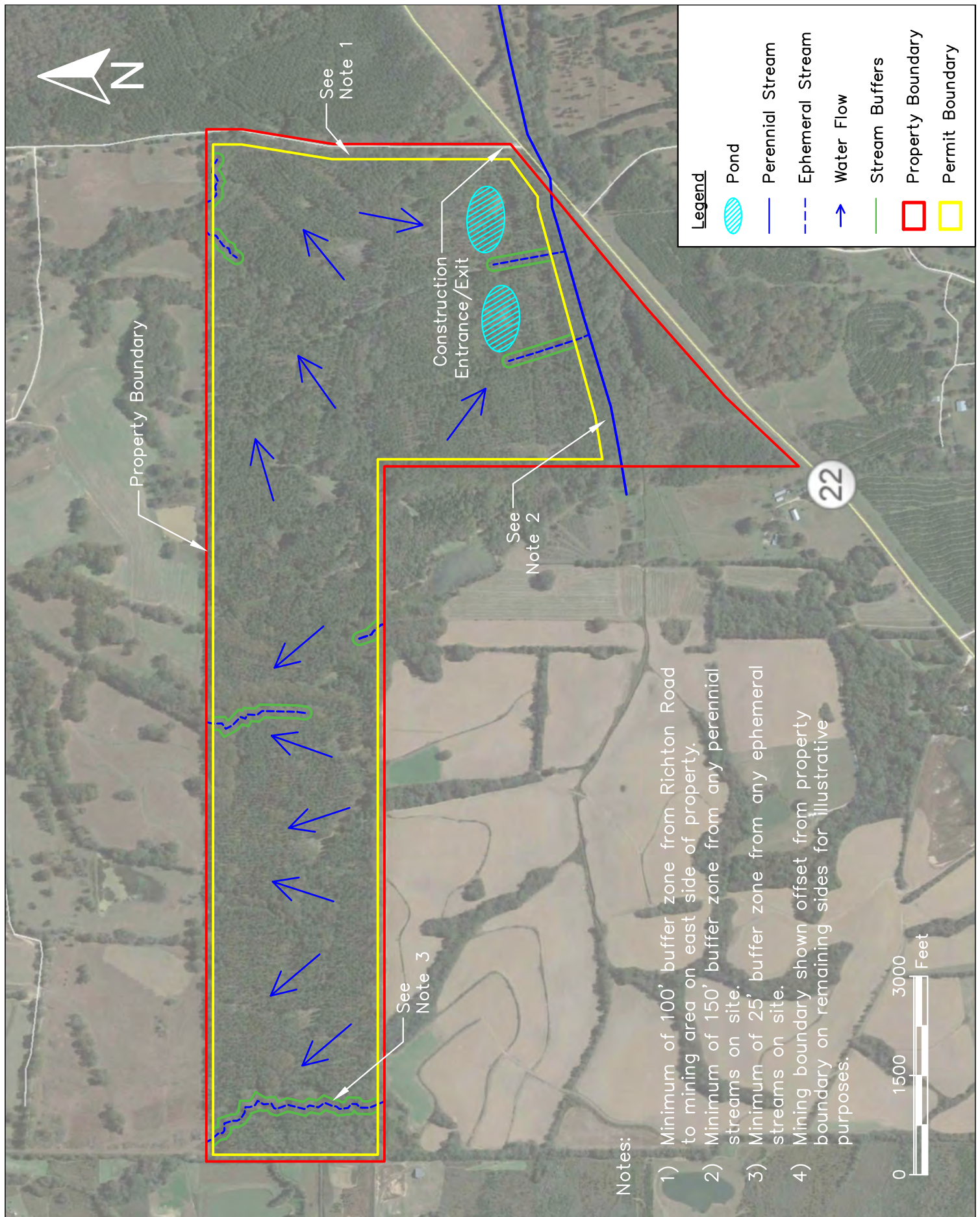
Mining and Reclamation Division

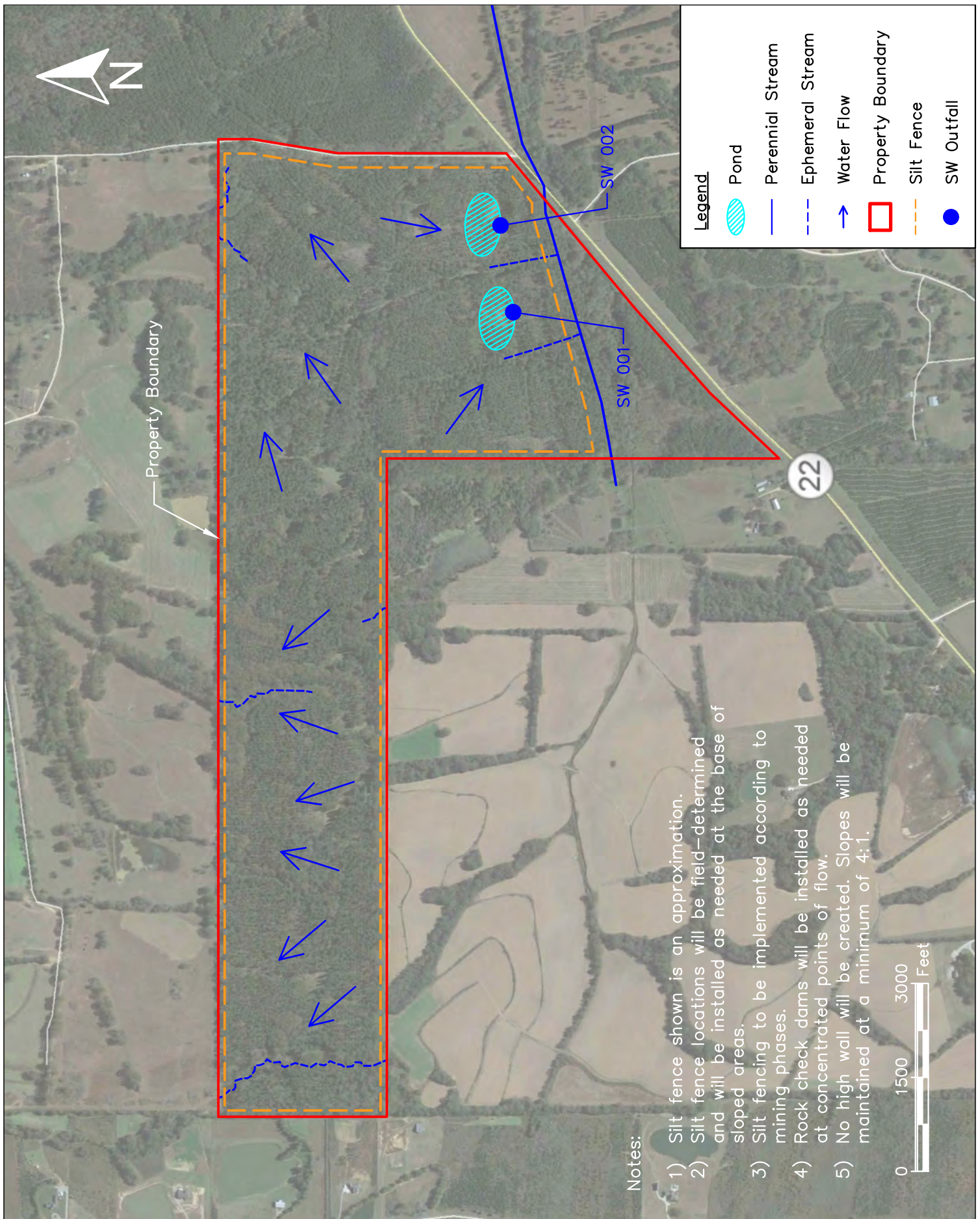
APPENDIX B

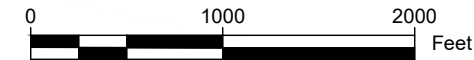
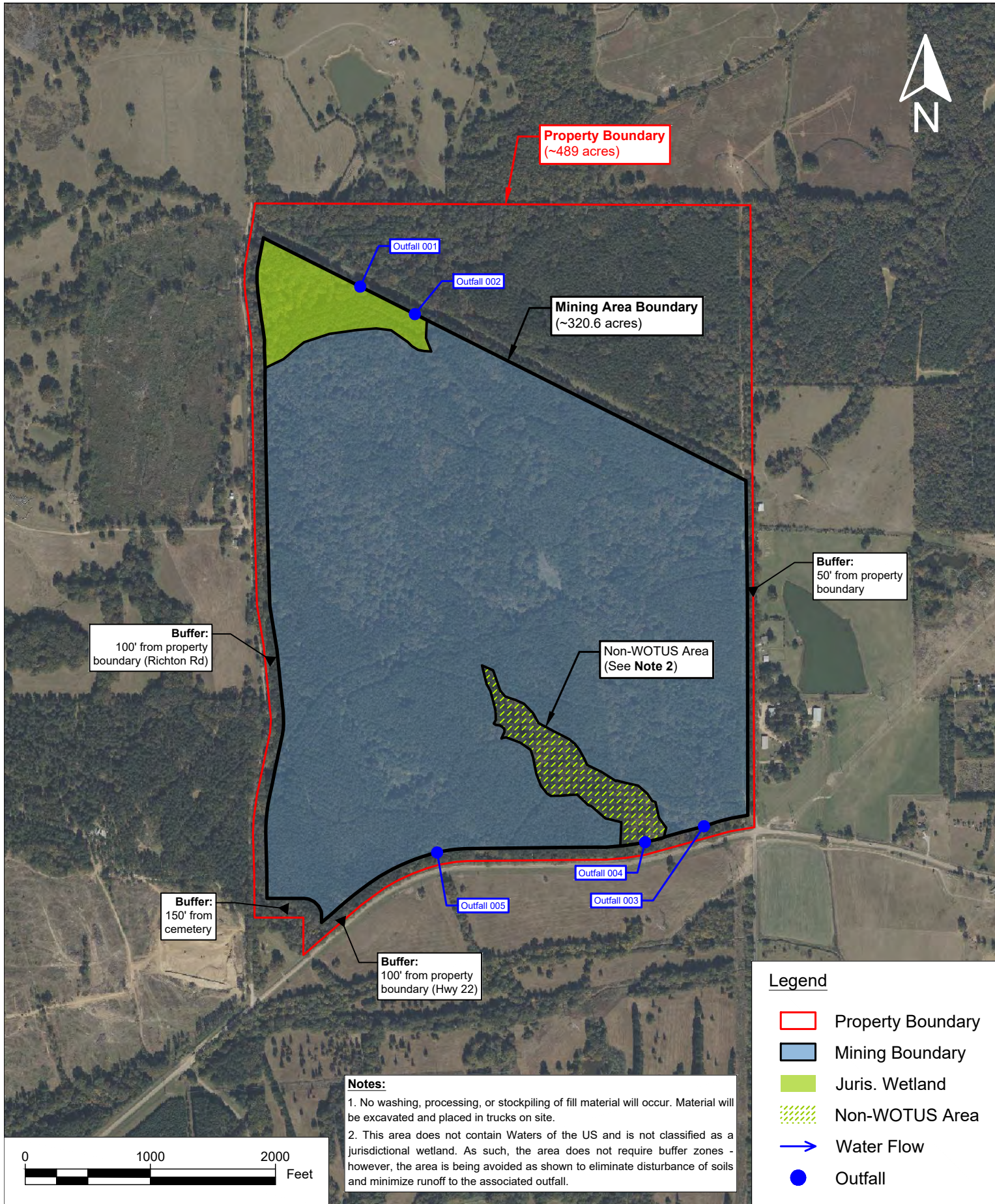
Figures and Erosion Control Drawings











Notes:

1. No washing, processing, or stockpiling of fill material will occur. Material will be excavated and placed in trucks on site.
2. This area does not contain Waters of the US and is not classified as a jurisdictional wetland. As such, the area does not require buffer zones - however, the area is being avoided as shown to eliminate disturbance of soils and minimize runoff to the associated outfall.

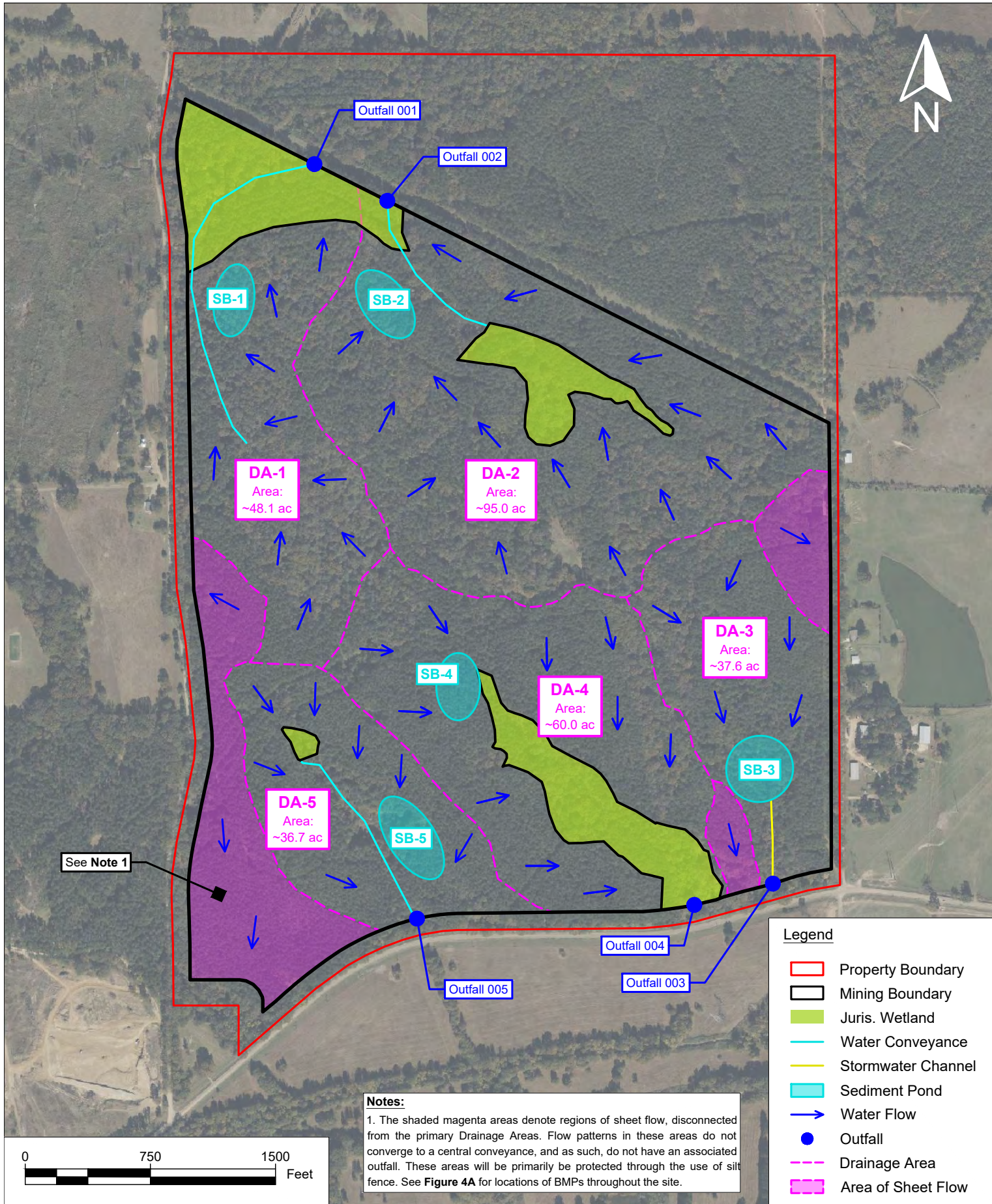
Legend

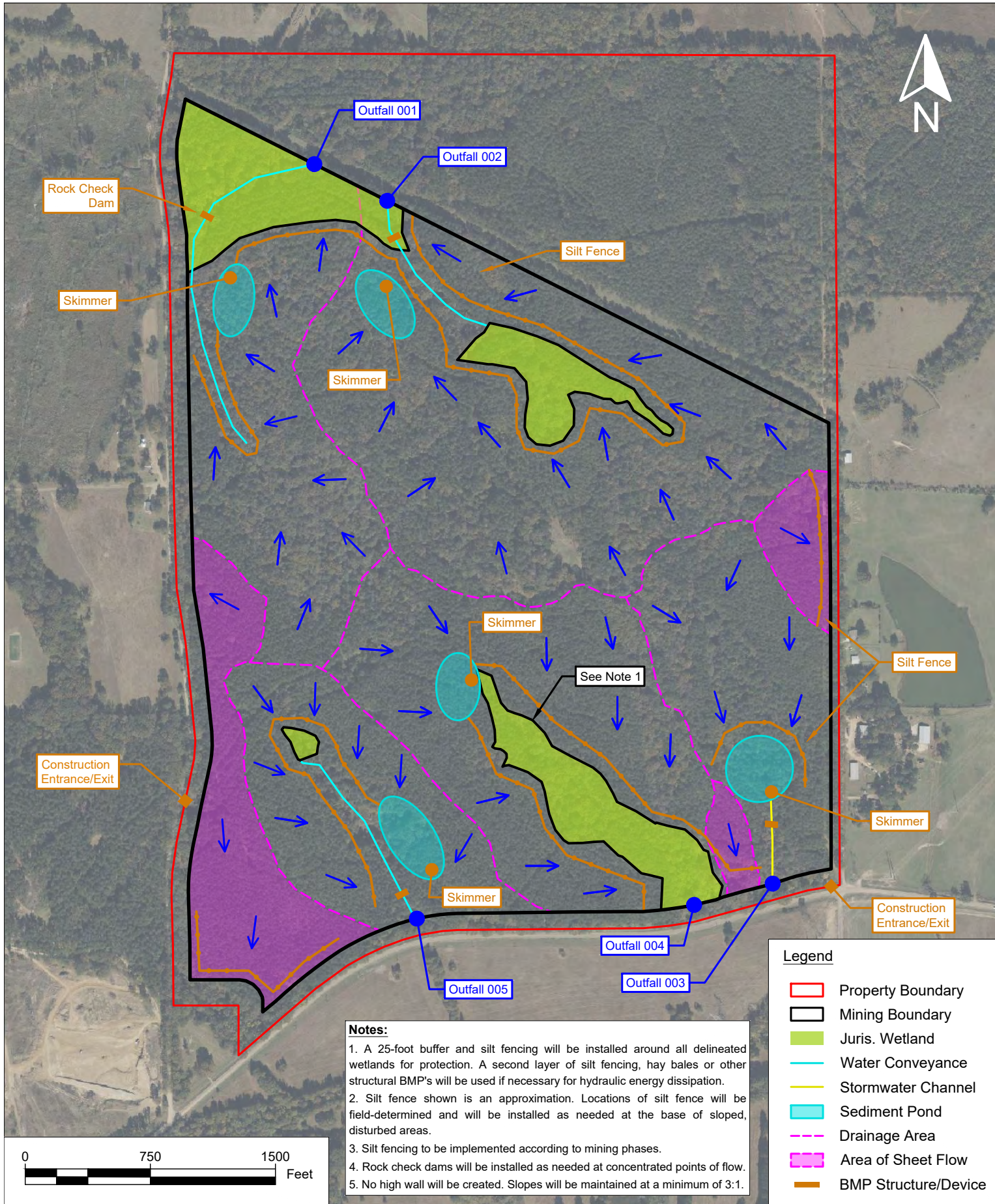
- Property Boundary
- Mining Boundary
- Juris. Wetland
- Non-WOTUS Area
- Water Flow
- Outfall



Turkey Ridge Holdings, LLC
Richton 22 Mine
N 32.588488°, W 90.143400°
Highway 22, Madison County, MS

Drawing #:	Figure 2A		
Drawing Name:	Site Location Aerial Map		
Project:	Mining Permit Application		
Map Source:	Google Earth		
Date Drawn:	6/17/2024	Drawn By:	TF



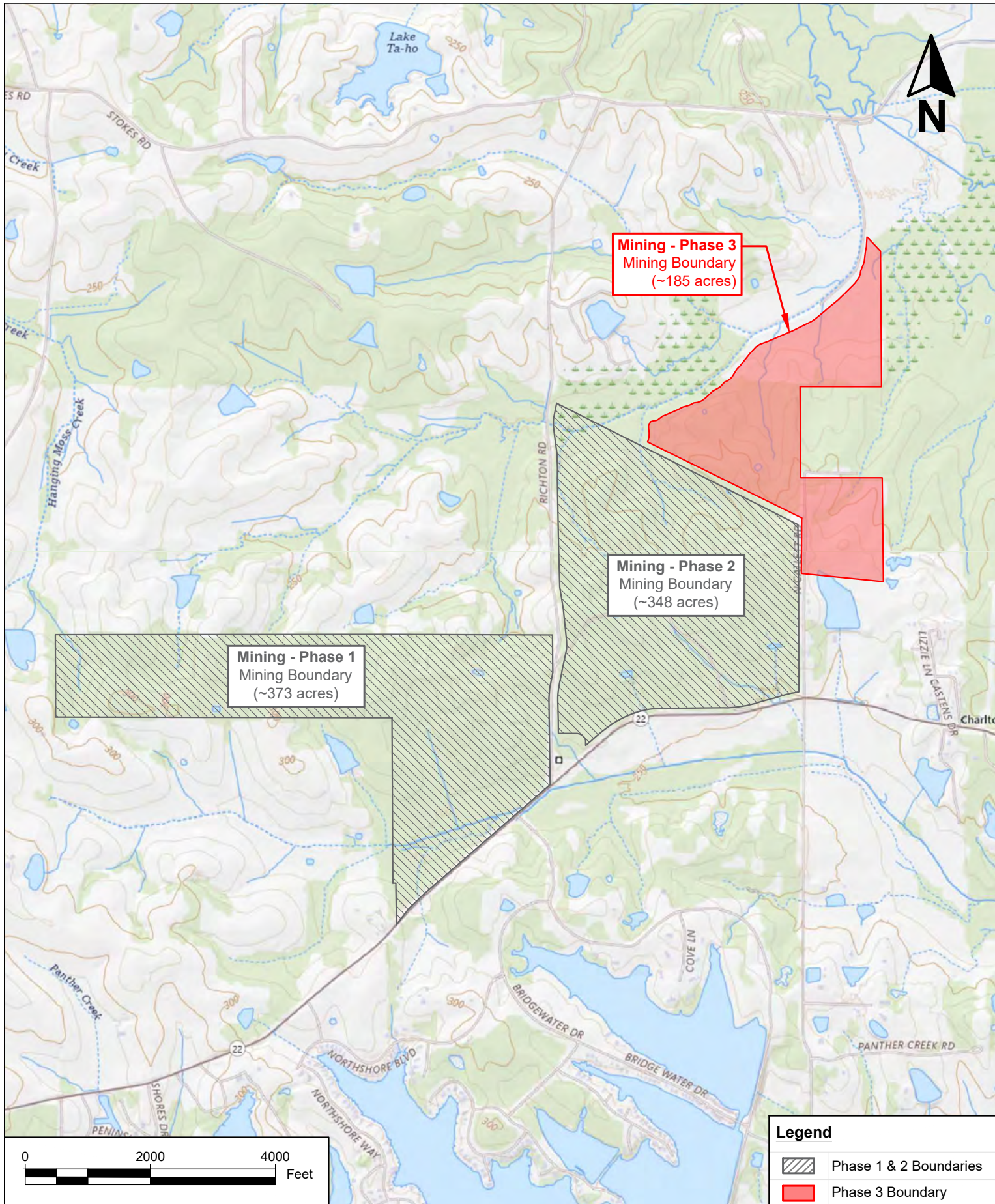


Turkey Ridge Holdings, LLC Richton 22 Mine N 32.588488°, W 90.143400° Highway 22, Madison County, MS	Drawing #:	Figure 4A		
	Drawing Name:	Site BMP Map		
	Project:	Mining Permit Application		
	Map Source:	Google Earth		
	Date Drawn:	6/17/2024 (Upd. 9/4/2024)	Drawn By:	TF

Drainage Areas & Sedimentation Basin Storage (4A)

Drainage Area	Corresponding Sediment Basin & Outfall		Total Drainage Area (ft ²)	Total Drainage Area (ac)	Required Sediment Storage Volume (ft ³)	Sediment Storage Volume Provided (ft ³)
DA-1	SB-1	001	2093167	48.1	172989.01	187500.00
DA-2	SB-2	002	4454200	102.3	368115.70	420000.00
DA-3	SB-3	003	1638576	37.6	135419.50	150000.00
DA-4	SB-4	004	2613252	60.0	215971.24	225000.00
DA-5	SB-5	005	1623315	37.3	134158.26	150000.00

Sediment Basin	Length (ft)	Width (ft)	Avg. Depth (ft)	Area (ft ²)	Volume (ft ³)	Required Volume (ft ³)
SB-1	250	250	3	62500	187500.00	172989.01
SB-2	400	350	3	140000	420000.00	368115.70
SB-3	250	200	3	50000	150000.00	135419.50
SB-4	300	250	3	75000	225000.00	215971.24
SB-5	250	200	3	50000	150000.00	134158.26

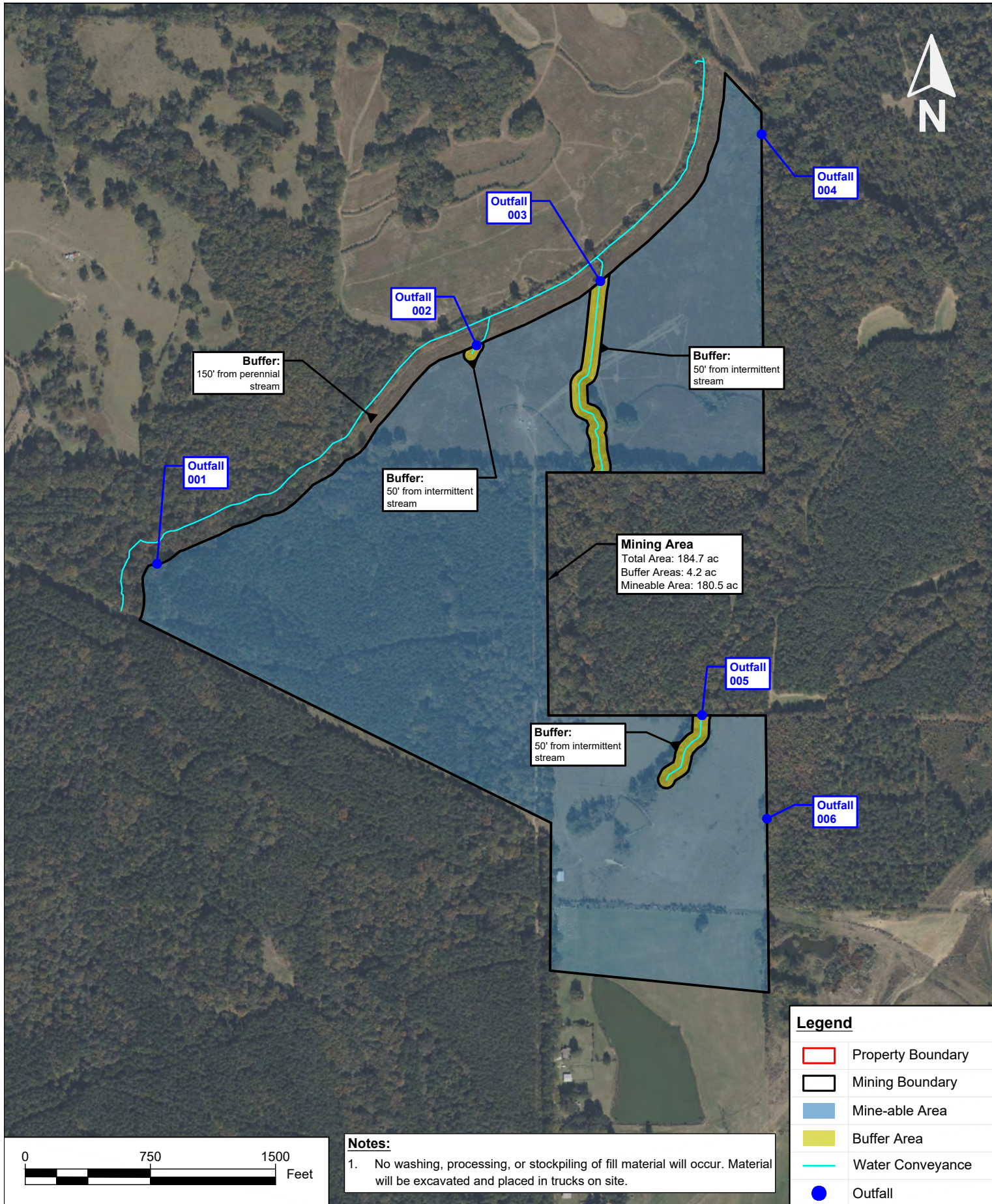


Legend	
	Phase 1 & 2 Boundaries
	Phase 3 Boundary



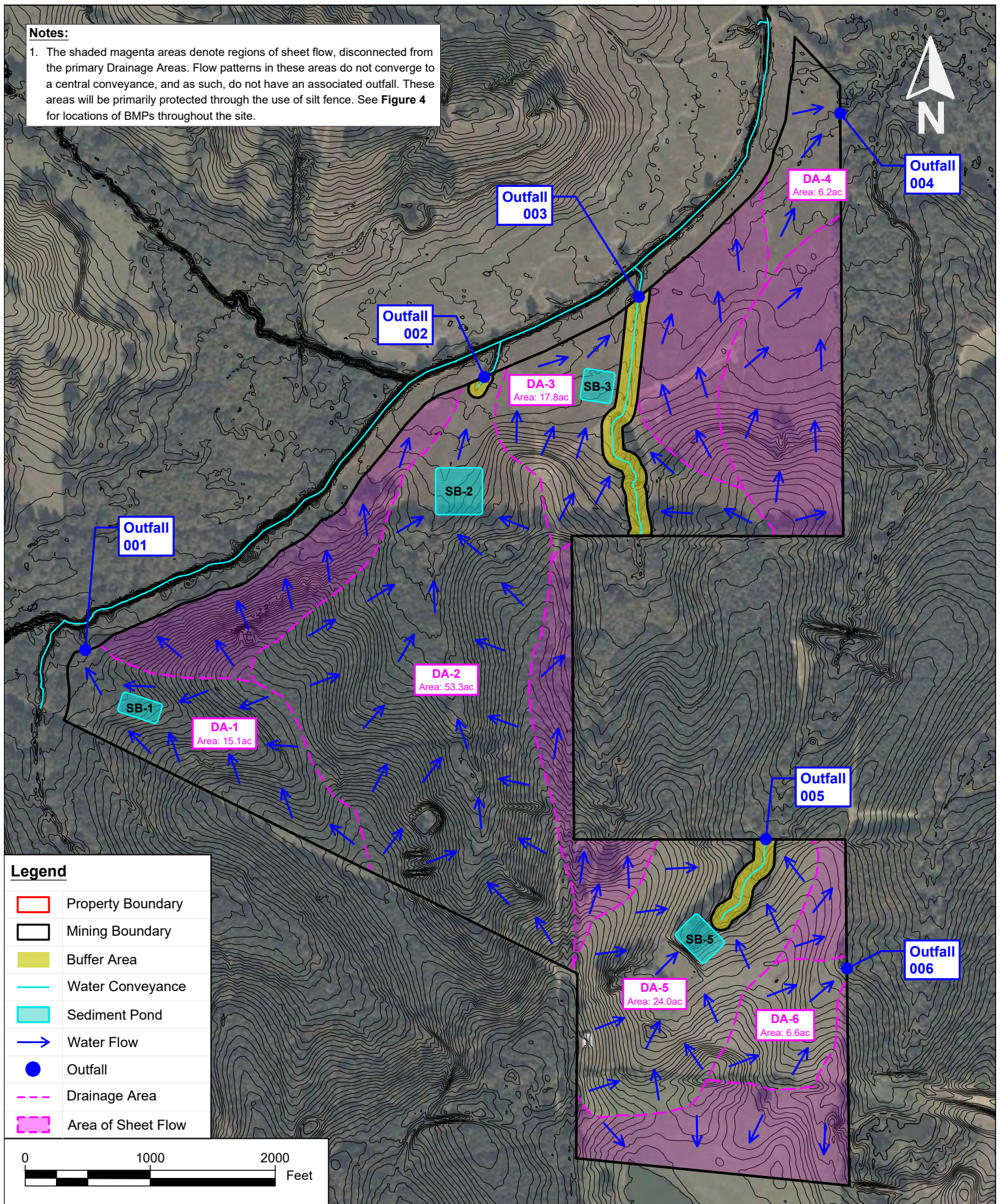
Turkey Ridge Holdings, LLC
 Richton 22 Mine - Phase 3
 N 32.588488°, W 90.143400°
 Highway 22, Madison County, MS

Drawing #:	Figure 1 B			
Drawing Name:	Site Location Topographic Map			
Project:	SWPPP			
Map Source:	USGS Topo			
Date Drawn:	10/24/2025	Upd:	10/30/2025	Drawn By: TF



Notes:

1. The shaded magenta areas denote regions of sheet flow, disconnected from the primary Drainage Areas. Flow patterns in these areas do not converge to a central conveyance, and as such, do not have an associated outfall. These areas will be primarily protected through the use of silt fence. See **Figure 4** for locations of BMPs throughout the site.



Legend

- Property Boundary
- Mining Boundary
- Buffer Area
- Water Conveyance
- Sediment Pond
- Water Flow
- Outfall
- Drainage Area
- Area of Sheet Flow

0 1000 2000
Feet

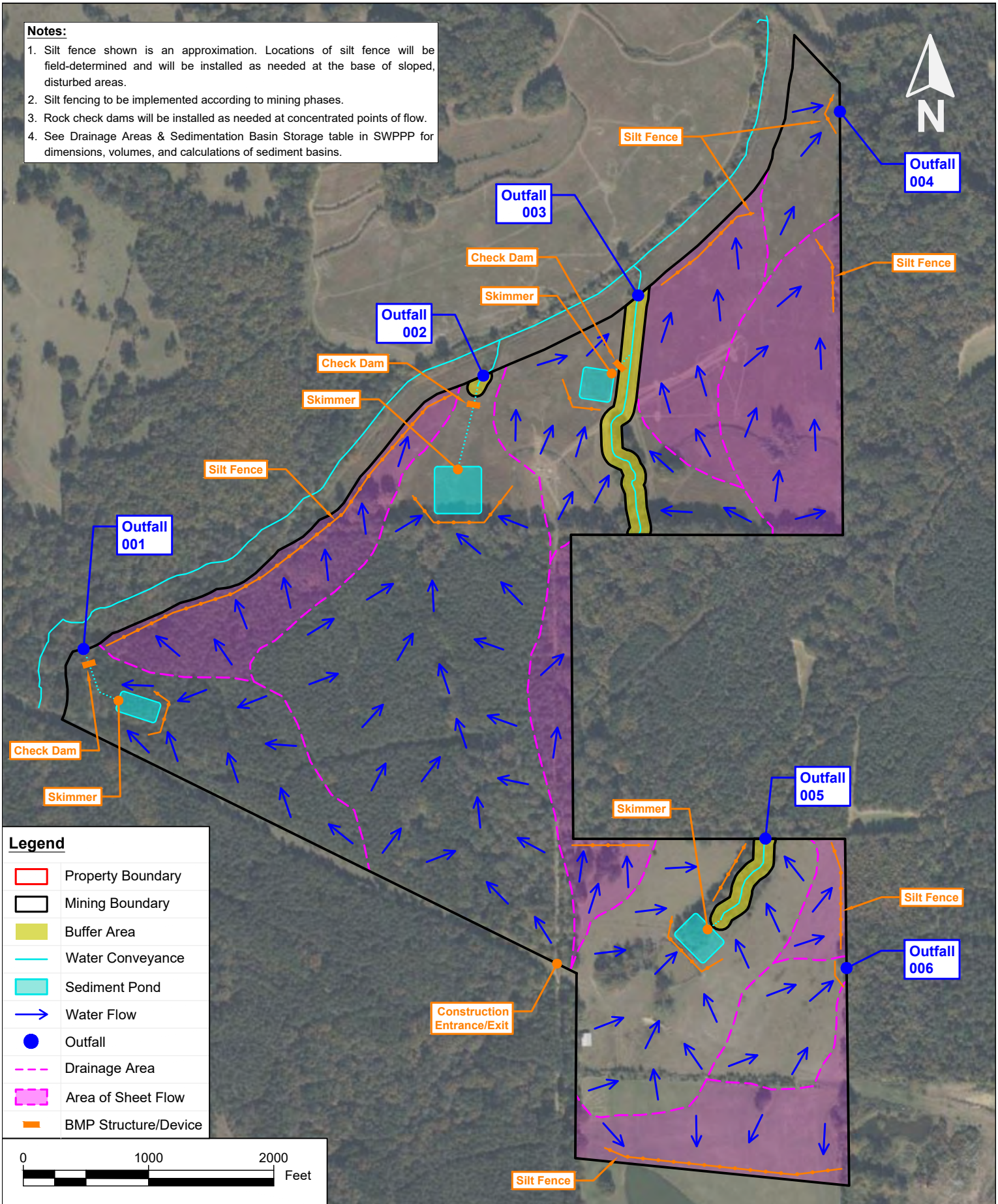


Turkey Ridge Holdings, LLC
Richton 22 Mine - Phase 3
N 32.588488°, W 90.143400°
Highway 22, Madison County, MS

Drawing #:	Figure 3 B			
Drawing Name:	Site Drainage Map			
Project:	SWPPP			
Map Source:	Google Earth			
Date Drawn:	10/24/2025	Upd:	10/30/2025	Drawn By: TF

Notes:

1. Silt fence shown is an approximation. Locations of silt fence will be field-determined and will be installed as needed at the base of sloped, disturbed areas.
2. Silt fencing to be implemented according to mining phases.
3. Rock check dams will be installed as needed at concentrated points of flow.
4. See Drainage Areas & Sedimentation Basin Storage table in SWPPP for dimensions, volumes, and calculations of sediment basins.



Legend

	Property Boundary
	Mining Boundary
	Buffer Area
	Water Conveyance
	Sediment Pond
	Water Flow
	Outfall
	Drainage Area
	Area of Sheet Flow
	BMP Structure/Device



Turkey Ridge Holdings, LLC
Richton 22 Mine - Phase 3
N 32.588488°, W 90.143400°
Highway 22, Madison County, MS

Drawing #:	Figure 4 B				
Drawing Name:	Site BMP Map				
Project:	SWPPP				
Map Source:	Google Earth				
Date Drawn:	10/24/2025	Upd:	10/30/2025	Drawn By:	TF

Drainage Areas & Sedimentation Basin Storage (4B)

Drainage Area	Corresponding Sediment Basin & Outfall		Total Drainage Area (ft ²)	Total Drainage Area (acres)	Req'd Sediment Storage Volume (ft ³)	Sediment Storage Volume Provided (ft ³)	
DA-1	SB-1	001	660,132	15.2	54,556.36	60,000.00	✓
DA-2	SB-2	002	2,322,215	53.3	191,918.60	202,500.00	✓
DA-3	SB-3	003	776,115	17.8	64,141.74	67,500.00	✓
DA-4	-	004	272,113	6.2	See Note 1	-	
DA-5	SB-5	005	1,045,312	24.0	86,389.42	90,000.00	✓
DA-6	-	006	289,552	6.6	See Note 1	-	

Sediment Basin	Length (ft)	Width (ft)	Avg. Depth (ft)	Area (ft ²)	Volume (ft ³)	Required Volume (ft ³)
SB-1	100	200	3	20,000	60,000.00	54,556.36
SB-2	225	225	4	50,625	202,500.00	191,918.60
SB-3	150	150	3	22,500	67,500.00	64,141.74
SB-5	150	200	3	30,000	90,000.00	86,389.42

Note 1: Based on their areas being less than ten acres, Drainage Areas 4 & 6 do not require sediment basins. These areas are primarily protected through the use of silt fence and other active stormwater management strategies.

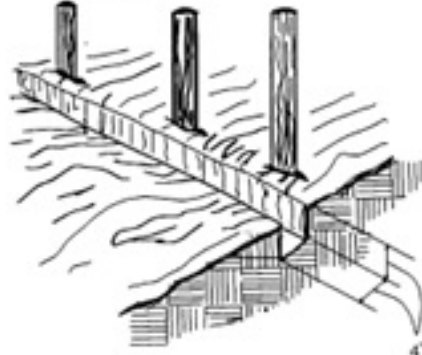
Typical Silt Fence Installation

CONSTRUCTION OF A SILT FENCE (WITHOUT WIRE SUPPORT)

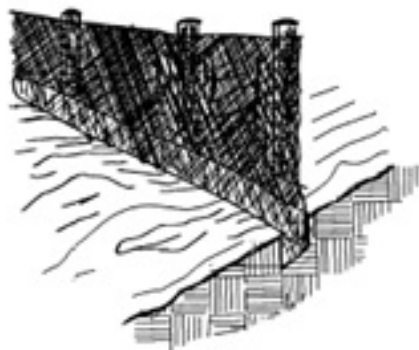
1. SET THE STAKES.



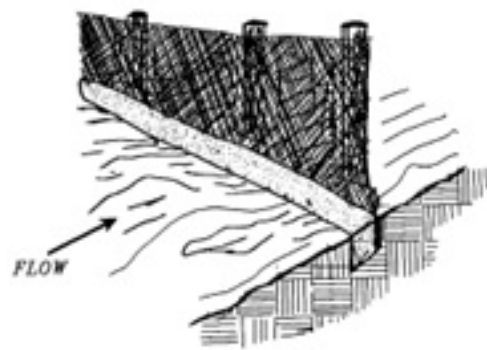
2. EXCAVATE A 4" X 4" TRENCH
UPSLOPE ALONG THE LINE OF
STAKES.



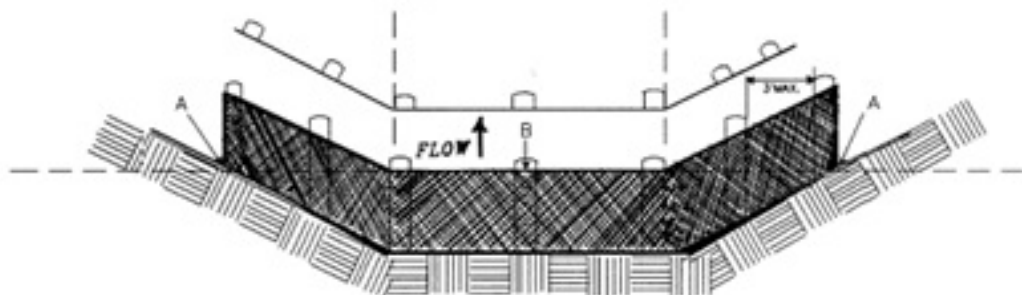
3. STAPLE FILTER MATERIAL
TO STAKES AND EXTEND
IT INTO THE TRENCH.



4. BACKFILL AND COMPACT
THE EXCAVATED SOIL.



SHEET FLOW INSTALLATION
(PERSPECTIVE VIEW)



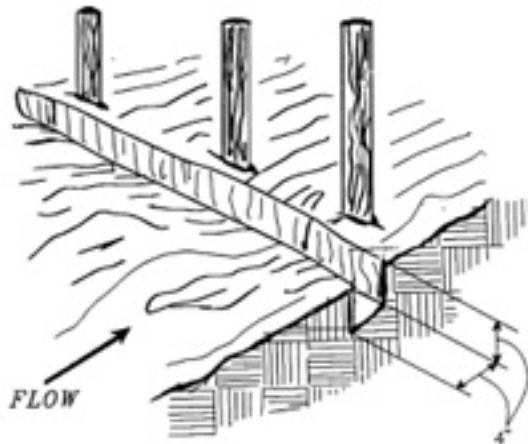
POINTS A SHOULD BE HIGHER THAN POINT B.

DRAINAGEWAY INSTALLATION
(FRONT ELEVATION)

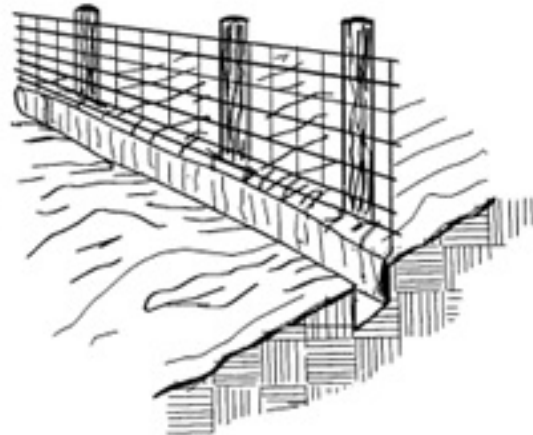
Typical Silt Fence Installation

CONSTRUCTION OF A SILT FENCE (WITH WIRE SUPPORT)

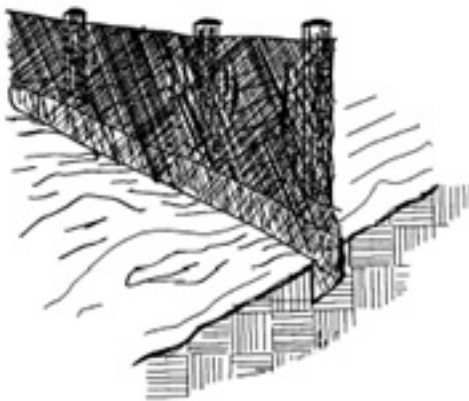
1. SET POSTS AND EXCAVATE A 4"X4" TRENCH UPSLOPE ALONG THE LINE OF POSTS.



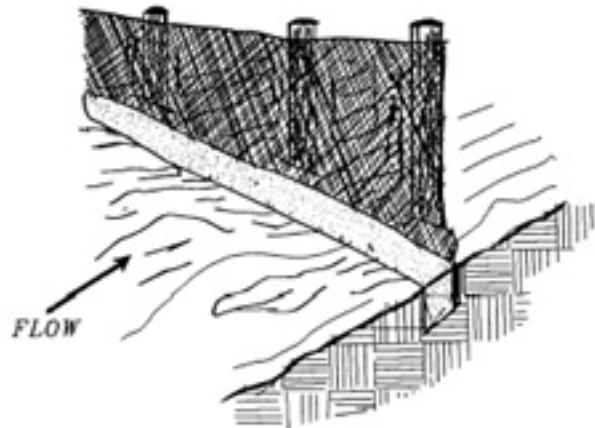
2. STAPLE WIRE FENCING TO THE POSTS.



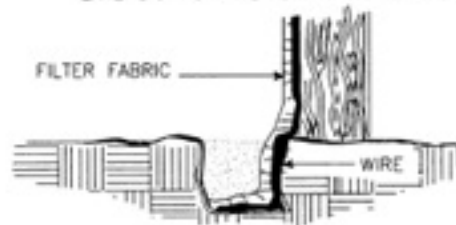
3. ATTACH THE FILTER FABRIC TO THE WIRE FENCE AND EXTEND IT INTO THE TRENCH.



4. BACKFILL AND COMPACT THE EXCAVATED SOIL.

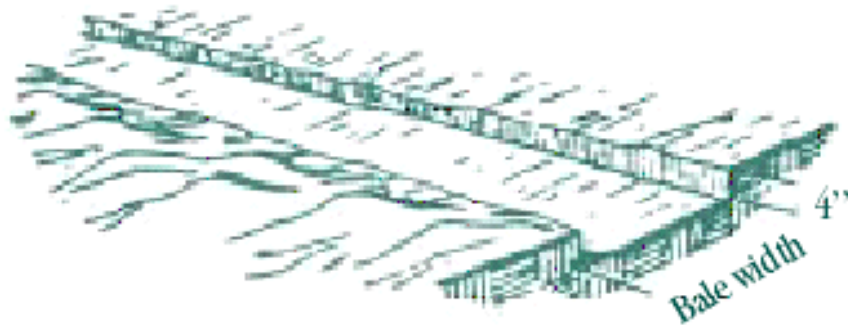


EXTENSION OF FABRIC AND WIRE INTO THE TRENCH.



Typical Hay Bale Installation

- 1) Excavate the trench the width of the bale and 4" in height.



- 2) Place and stake the bales with 2 steel pickets or 2"x2" stakes. The first stake should be angled toward the previously laid bale. Trim or cap tops of stakes.

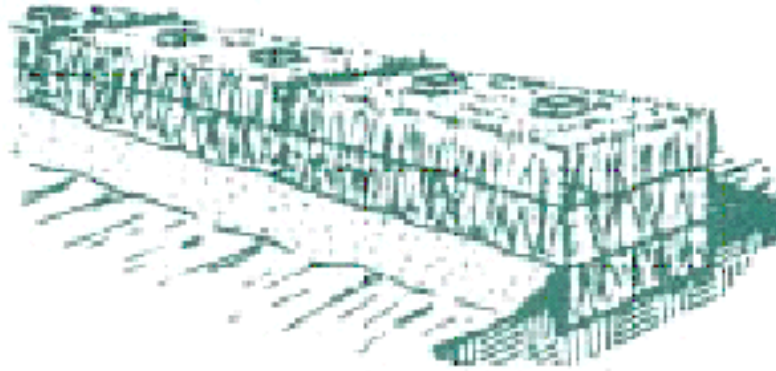


- 3) Wedge loose straw between bales.



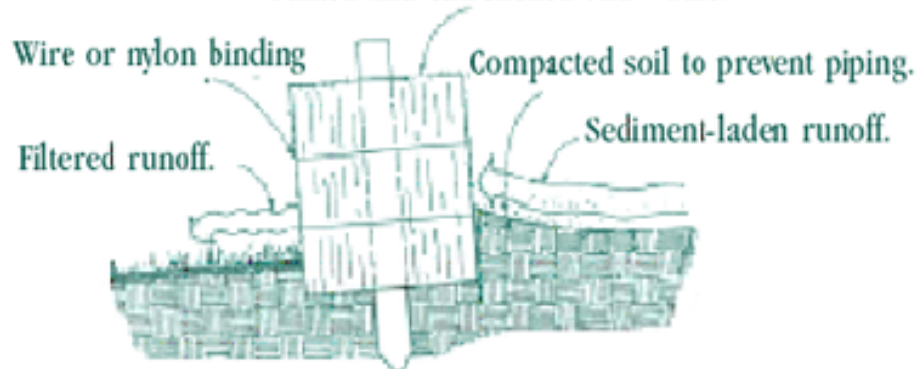
Typical Hay Bale Installation

4) Backfill and compact the excavated soil.



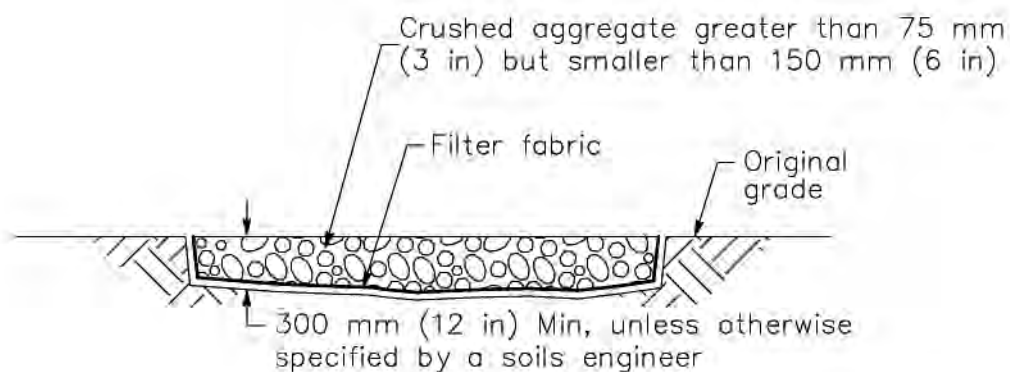
5) Cross section of a properly installed straw bale.

Staked and entrenched straw bale.

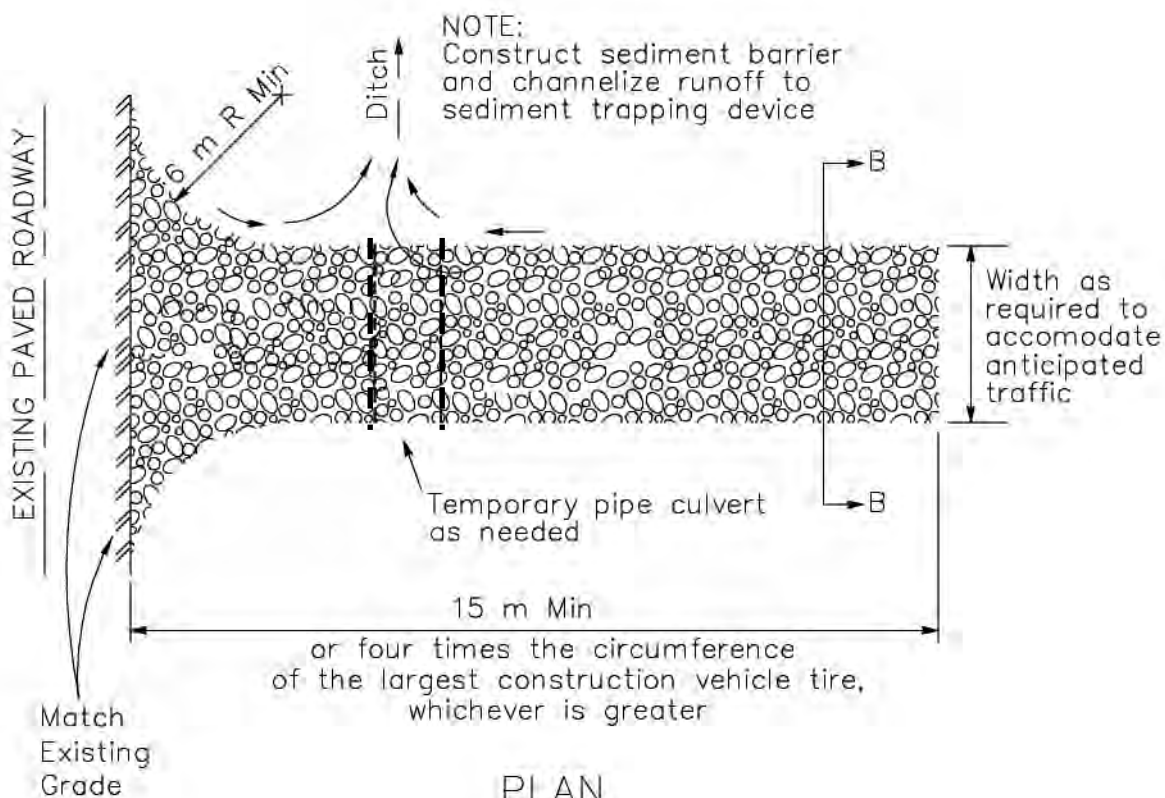


Typical Construction Entrance/Exit Stabilization

Type 1



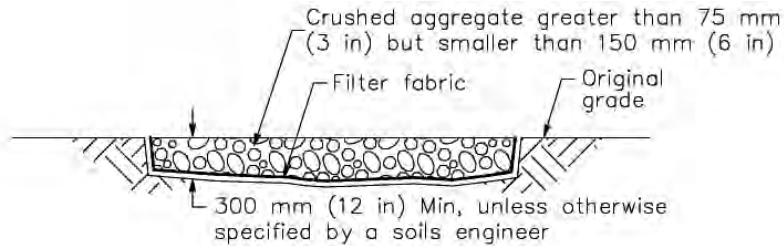
SECTION B-B
NTS



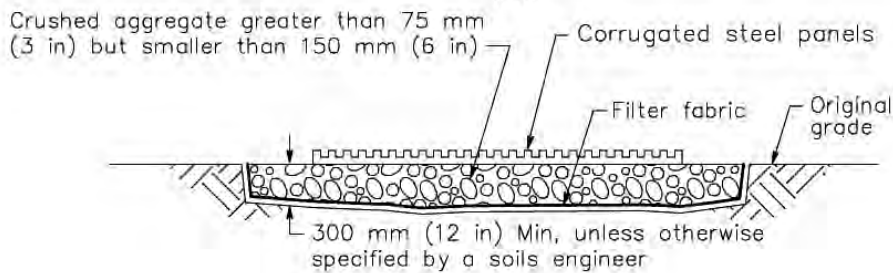
PLAN
NTS

Typical Construction Entrance/Exit Stabilization

Type 2

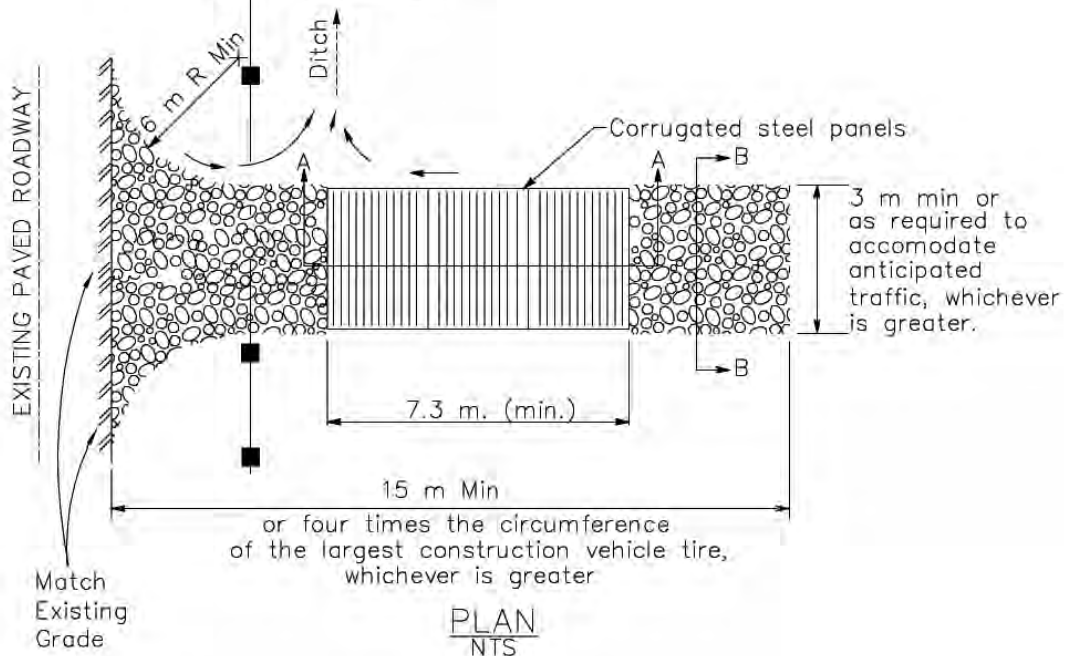
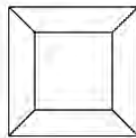


SECTION B-B
NTS



SECTION A-A
NOT TO SCALE

NOTE:
Construct sediment barrier
and channelize runoff to
sediment trapping device



APPENDIX C

Records of Monthly Inspections

APPENDIX D

Records of Annual, Periodic and Episodic Training

APPENDIX E

Records of Significant Spills and Leaks & Notifications to Agencies

APPENDIX F

WETLANDS / SECTION 404 DOCUMENTATION



MEMO

TO: MDEQ Env. Permitting Division
FROM: Shawn Clark, P.E., BCEE
REFERENCE: Turkey Ridge – Phase 3 Mine Permit
SUBJECT: Wetland Delineation
DATE: October 10, 2025

While conducting a desktop review of the subject project I identified potentially jurisdictional waters on the property. I reviewed the available information including the USFWS National Wetland Inventory (NWI), the National Hydrography Dataset (NHD), LIDAR data and a custom soil report using NRCS WebSoil Survey. Based on these findings I visited the site on September 9, 2025, to evaluate these features to determine the potential jurisdictional status. Initial observations revealed that the site has been subject to extensive hydrologic modification. Panther Creek, which is the northern property boundary, has been historically straightened and channelized as have the unnamed tributaries on the site. As a result, the stream and unnamed tributaries/ditches on the site are highly incised with stream width roughly equal to stream depth. Flows rarely exceed the stream banks to reach the floodplain.

LIDAR and NHD data indicated a possible intermittent tributary running south to north in the west-central portion of the project area. Field investigation showed a small tributary with defined bed/banks in the (formerly) forested area, but the stream features were not present in the field/pasture area. The water must sheet flow through the area as no defining channel features were observed. LIDAR also showed two depressional areas on the western side of the property that appeared to be small, constructed impoundments. Field observation showed small depressional areas that may have been excavated at one time but were not found to hold water.

Two additional excavated/intermittent waters were observed. One extends from Panther Creek to the project boundary and has an existing culverted crossing as shown in the Mine Boundary Map. The other starts downstream of the farm pond and extends north to the project boundary. As you can see in the aerial photograph, this farm pond is constructed in uplands, is isolated and landlocked.

MDEQ Mining Stormwater Regulations require a 150-foot buffer on perennial waters. The only perennial stream/relatively permanent water observed on site is Panther Creek. Two (2) additional linear features were identified as intermittent or ephemeral. 40 CFR §120.2 (2023) states that “ephemeral features, including erosional features (gullies and rills)” are excluded from Waters of the US (WOTUS) jurisdiction. However, Mississippi Code § 51-3-3 defines a watercourse as “any natural lake, river, creek, cut, or other natural body of fresh water...having definite banks and bed with visible evidence of flow except such lakes without outlet to which only one (1) landowner is riparian”. These two (2) linear features exhibited

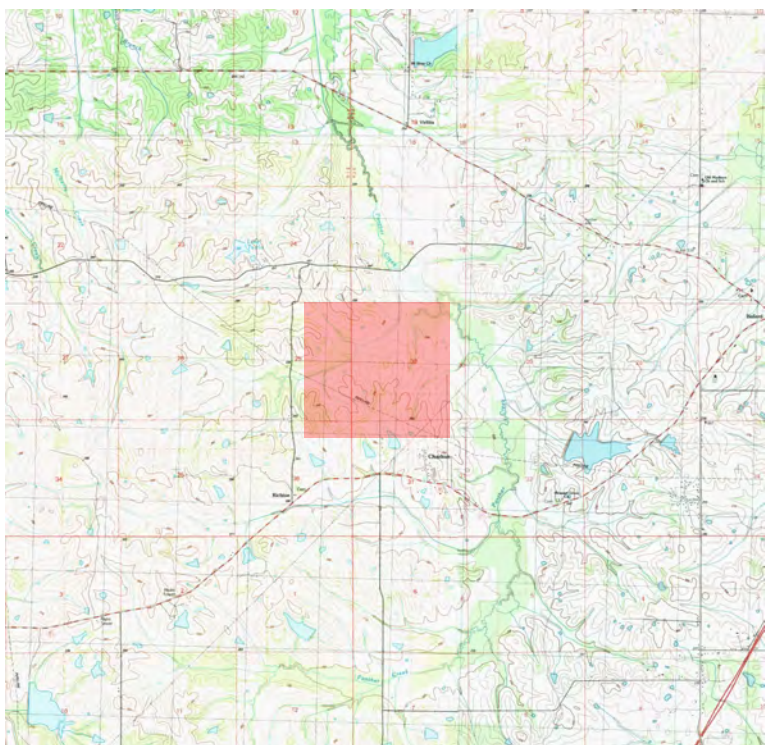
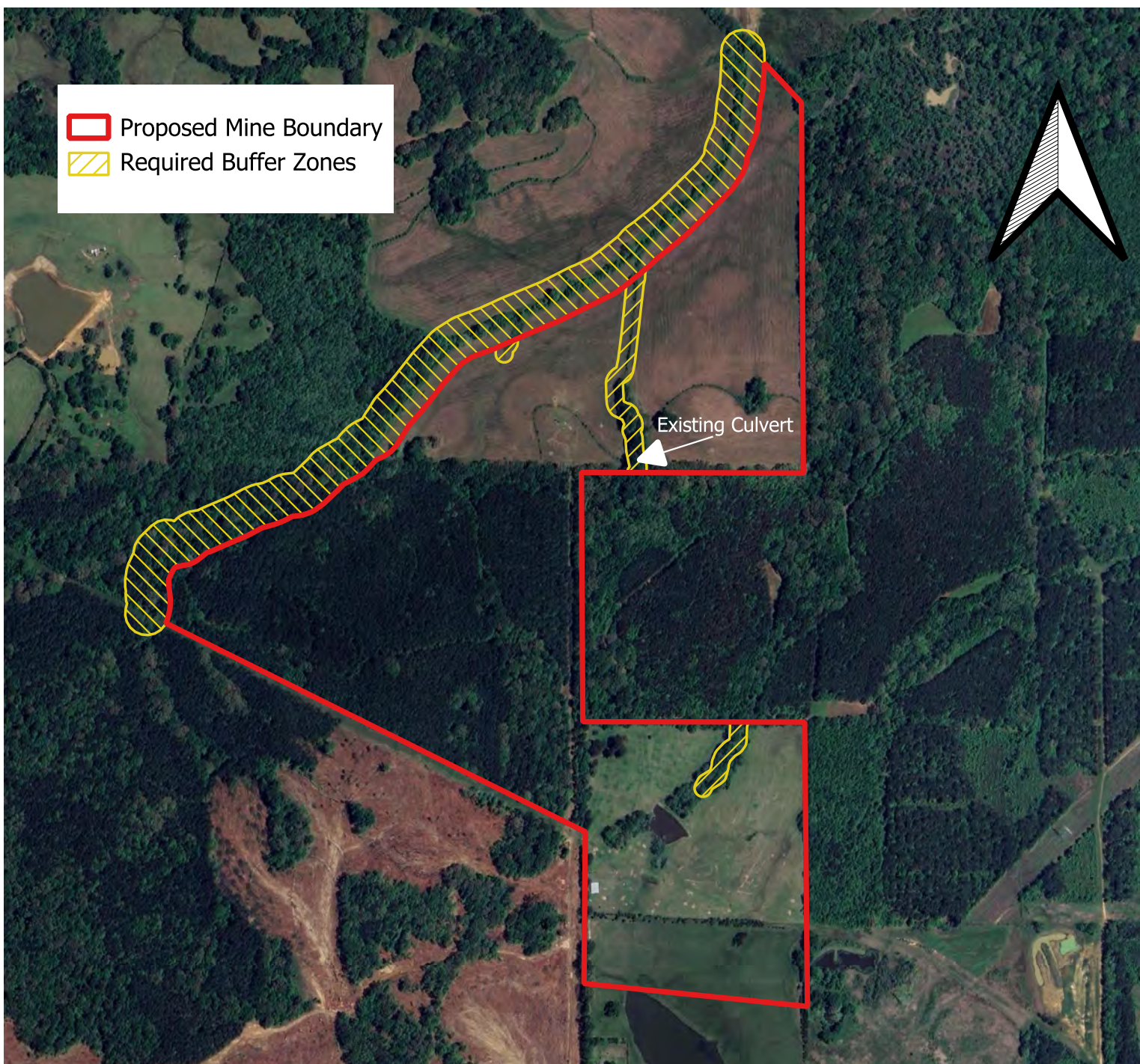
defined bed and banks with some evidence of intermittent flow. One additional erosion feature was observed on the northern project boundary n that extended approximately 50-feet outside the required buffer zone along Panther Creek. A 50-foot buffer is recommended for these features as required by MDEQ Mining Stormwater Regulations for intermittent waters as shown in the map below.

The Mississippi Legislature defines “waters of the state” including “all streams, lakes, ponds, impounding reservoirs, marshes, watercourses, waterways, wells, springs,....except lakes, ponds, or other surface waters which are wholly landlocked and privately owned and are not regulated under the Federal Clean Water Act” (33 U.S.C 1251 et seq). Similarly, 40 CFR §120.2 (2023) (b)(5) excludes “artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing”. The farm pond and isolated erosional features are isolated, wholly landlocked, and by definition is neither a Water of the US (WOTUS) nor Water of the State (WOTS).

I recommend that 50 and 150-foot buffer zones be maintained along the unnamed tributaries and connected intermittent features as required by the Mining Stormwater General Permit as shown in the maps below. The existing culverted crossing should allow access to the eastern portion of the property while honoring the buffer zone requirements.

Please let me know if you have any questions.

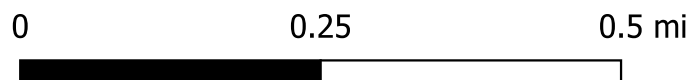
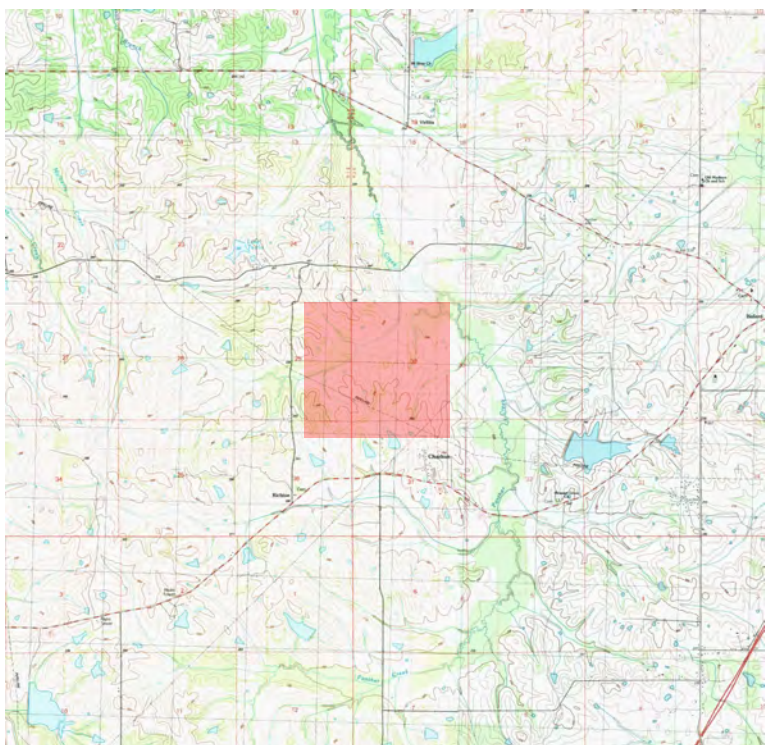
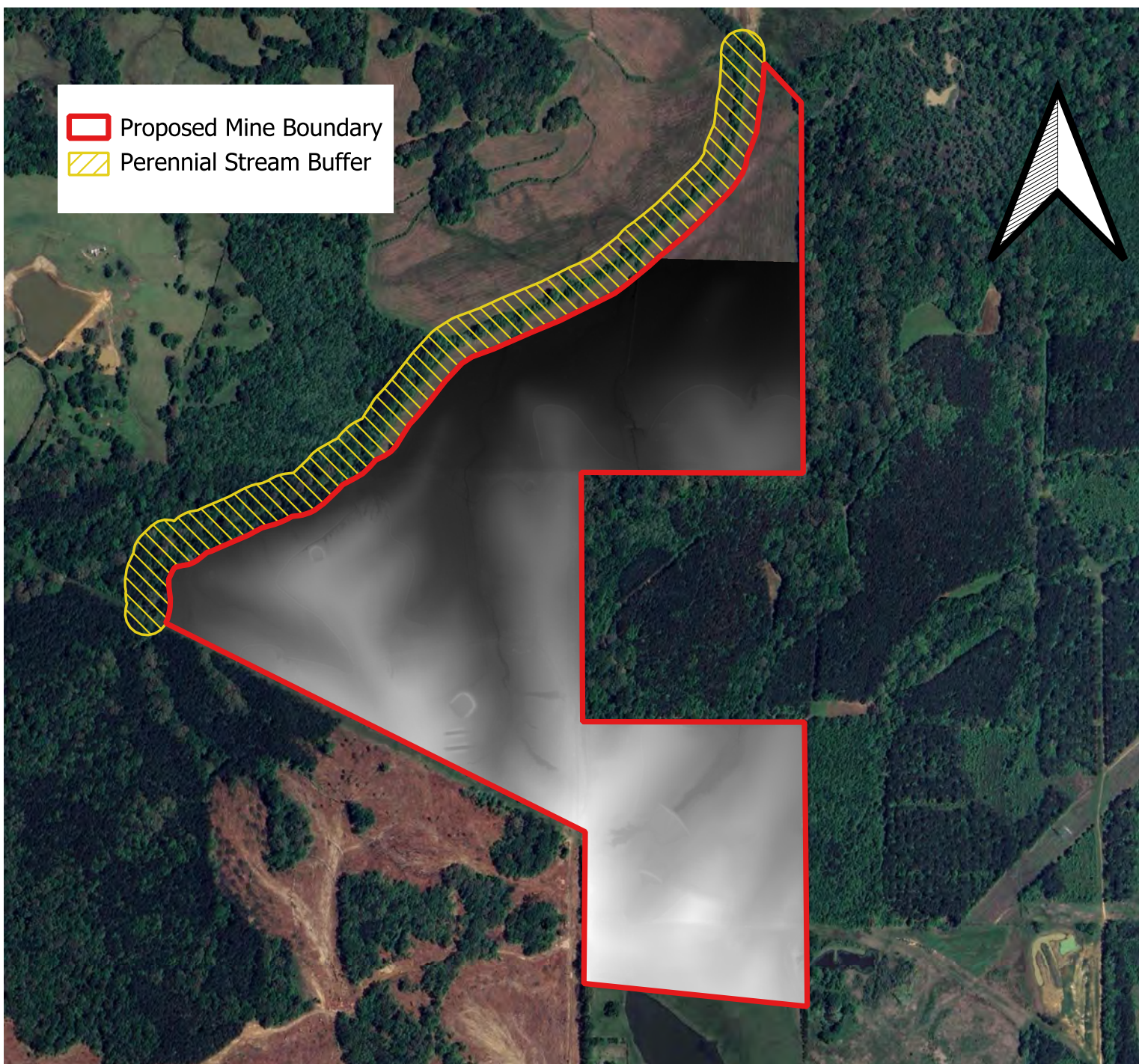
Wetland Study Figures



0 0.25 0.5 mi

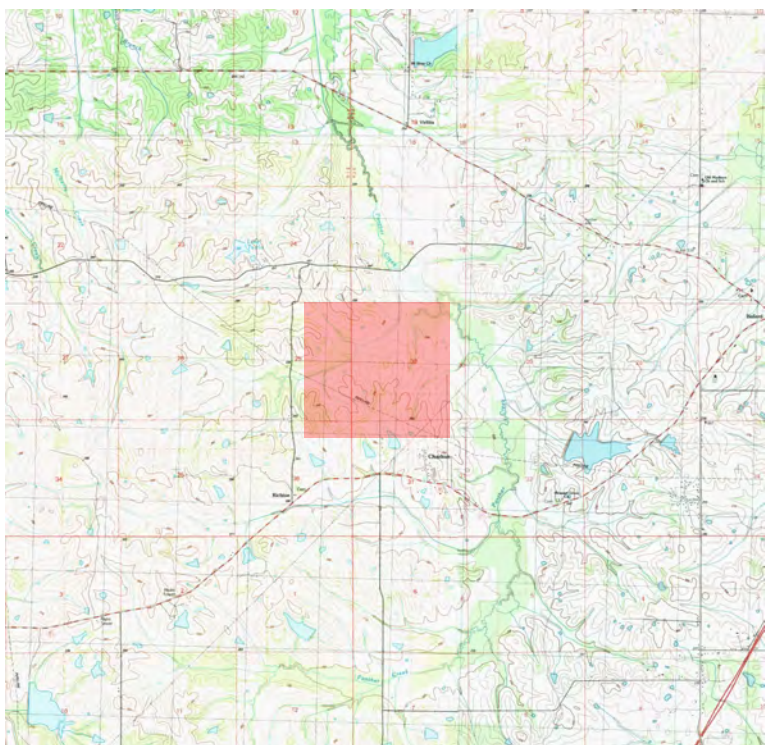
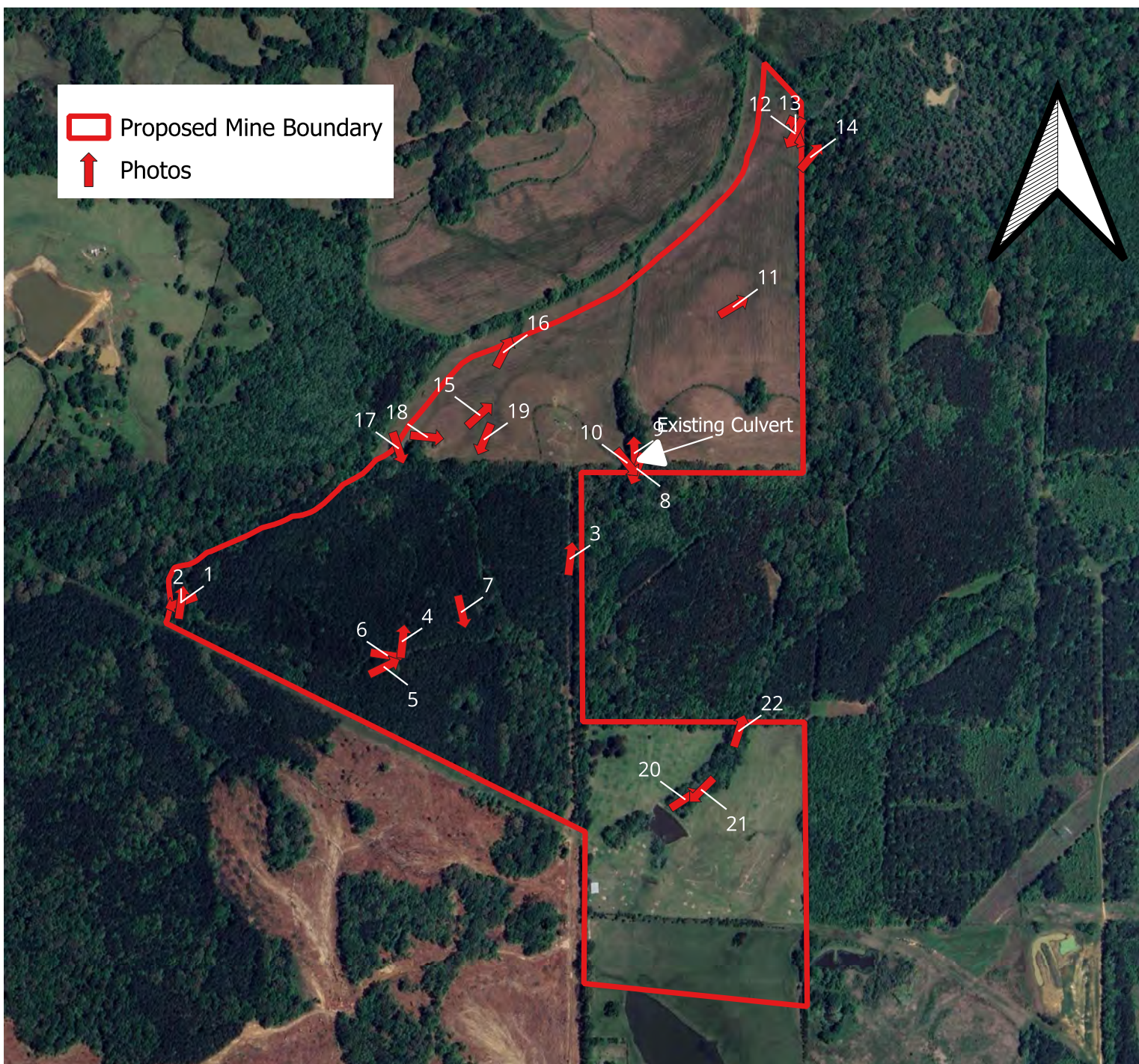
R22 Phase 3 Expansion
Highway 22
Madison County, Mississippi
Proposed Mine Boundary
9/10/2025





R22 Phase 3 Expansion
Highway 22
Madison County, Mississippi
LIDAR Map
10/9//2025

Photos



0 0.25 0.5 mi

R22 Phase 3 Expansion
Highway 22
Madison County, Mississippi
Photo Index Map
9/10/2025



Sampling Point:
N/A

1



Direction

Lat Lon from photo
32.59477023, -90.14429787

233 Elevation
in feet

Photo date: Tue, Sep 9, 2025 7:22 AM CDT



Sampling Point:
N/A

2



Direction

Lat Lon from photo
32.59476942, -90.14429658

233 Elevation
in feet

Photo date: Tue, Sep 9, 2025 7:22 AM CDT



Sampling Point:
N/A

3
End of Swale



Direction

Lat Lon from photo
32.59547197, -90.13687583

253

Elevation
in feet

Photo date: Tue, Sep 9, 2025 7:46 AM CDT



Sampling Point:
N/A

4



Direction

Lat Lon from photo
32.59414483, -90.14007445

246

Elevation
in feet

Photo date: Tue, Sep 9, 2025 7:54 AM CDT



Sampling Point:
N/A

5



Direction

Lat Lon from photo
32.59372808,
-90.14042258

256 Elevation
in feet

Photo date: Tue, Sep 9, 2025 7:56 AM CDT



Sampling Point:
N/A

6



Direction

Lat Lon from photo
32.59421663,
-90.14066742

256 Elevation
in feet

Photo date: Tue, Sep 9, 2025 7:59 AM CDT



Sampling Point:
N/A

7



Direction

Lat Lon from photo
32.59421663,
-90.14066742

256 Elevation
in feet

Photo date: Tue, Sep 9, 2025 8:01 AM CDT



Sampling Point:
N/A

8

Drain at property line



Direction

Lat Lon from photo
32.59421663,
-90.14066742

256 Elevation
in feet

Photo date: Tue, Sep 9, 2025 8:06 AM CDT



Sampling Point:
N/A

9



Direction

Lat Lon from photo
32.59421663,
-90.14066742

256 Elevation
in feet

Photo date: Tue, Sep 9, 2025 8:07 AM CDT



Sampling Point:
N/A

10



Direction

Lat Lon from photo
32.59421663,
-90.14066742

256 Elevation
in feet

Photo date: Tue, Sep 9, 2025 8:07 AM CDT



Sampling Point:
N/A

11



Direction

Lat Lon from photo
32.59951725, -90.13376522

233 Elevation
in feet

Photo date: Tue, Sep 9, 2025 8:15 AM CDT



Sampling Point:
N/A

12

No swale or hydrology indicators



Direction

Lat Lon from photo
32.60162708, -90.13246932

213 Elevation
in feet

Photo date: Tue, Sep 9, 2025 8:20 AM CDT



Sampling Point:
N/A

13
7.5YR 5/1, 5YR 4/6



Direction

Lat Lon from photo
32.60162708,
-90.13246932

213 Elevation
in feet

Photo date: Tue, Sep 9, 2025 8:24 AM CDT



Sampling Point:
N/A

14
No drain



Direction

Lat Lon from photo
32.60162708,
-90.13246932

213 Elevation
in feet

Photo date: Tue, Sep 9, 2025 8:42 AM CDT



Sampling Point:
N/A

15
No drain



Direction

Lat Lon from photo
32.60162708,
-90.13246932

213

Elevation
in feet

Photo date: Tue, Sep 9, 2025 8:47 AM CDT



Sampling Point:
N/A

16
End of drain



Direction

Lat Lon from photo
32.60162708,
-90.13246932

213

Elevation
in feet

Photo date: Tue, Sep 9, 2025 8:49 AM CDT



Sampling Point:
N/A

17



Direction

Lat Lon from photo
32.5972465, -90.1401596

141 Elevation
in feet

Photo date: Tue, Sep 9, 2025 8:55 AM CDT



Sampling Point:
N/A

18



Direction

Lat Lon from photo
32.5974248, -90.1396077

144 Elevation
in feet

Photo date: Tue, Sep 9, 2025 8:56 AM CDT



Sampling Point:
N/A

19

Direction

Lat Lon from photo
32.5973884, -90.1385125

148 Elevation
in feet

Photo date: Tue, Sep 9, 2025 8:57 AM CDT



Sampling Point:
N/A

20

Direction

Lat Lon from photo
32.5916078, -90.1346969

171 Elevation
in feet

Photo date: Tue, Sep 9, 2025 9:09 AM CDT



Sampling Point:
N/A

21



Direction

Lat Lon from photo
32.5917539, -90.1343725

167 Elevation
in feet

Photo date: Tue, Sep 9, 2025 9:12 AM CDT



Sampling Point:
N/A

22



Direction

Lat Lon from photo
32.5927039, -90.1336597

161 Elevation
in feet

Photo date: Tue, Sep 9, 2025 9:16 AM CDT

Soil Report



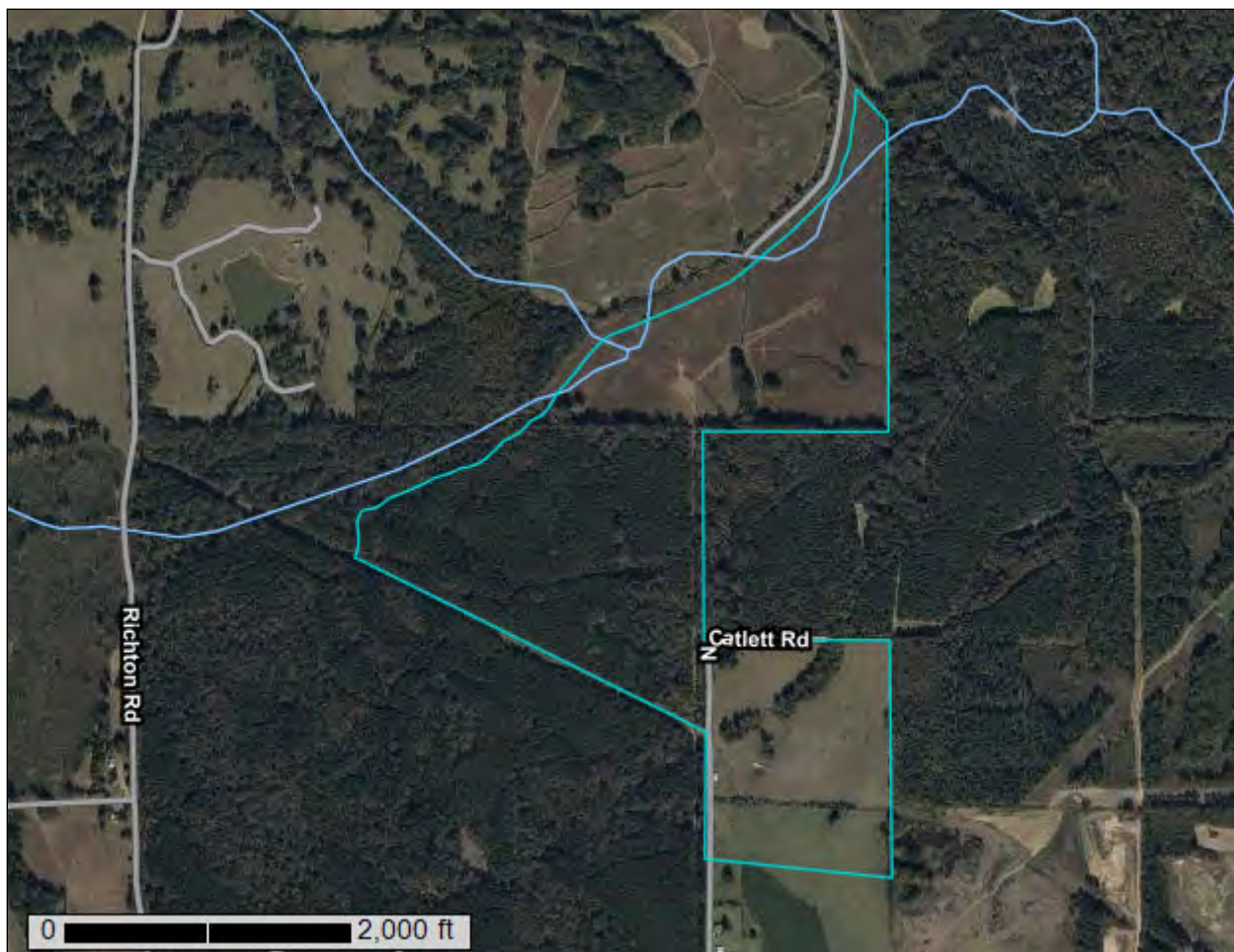
United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Madison County, Mississippi**



October 10, 2025

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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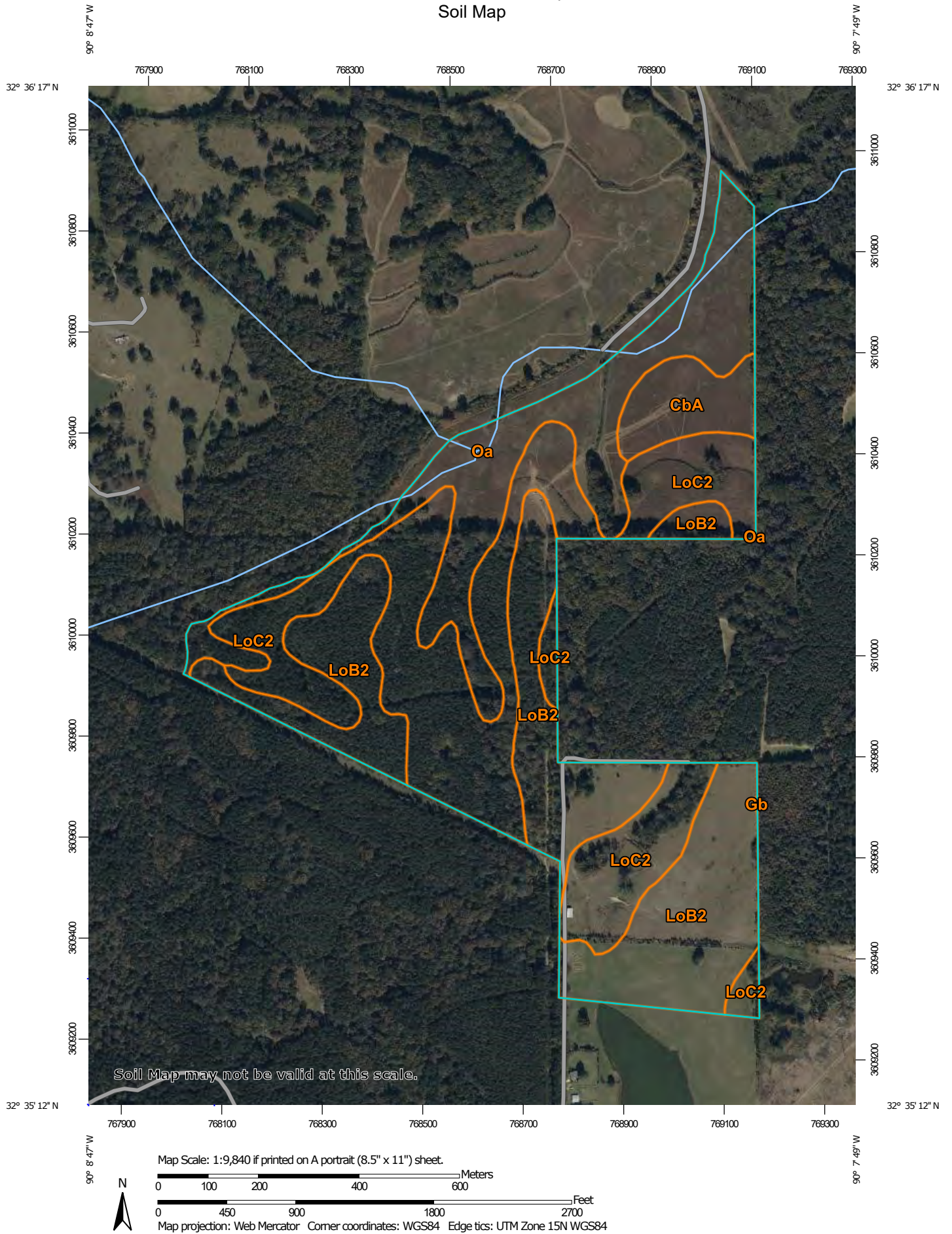
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Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



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MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Madison County, Mississippi
Survey Area Data: Version 20, Sep 8, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 8, 2021—Nov 29, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CbA	Calloway silt loam, 0 to 1 percent slopes	9.5	5.2%
Gb	Gillsburg silt loam	0.0	0.0%
LoB2	Loring silt loam, 2 to 5 percent slopes, moderately eroded, central	63.4	34.3%
LoC2	Loring silt loam, 5 to 8 percent slopes, moderately eroded, central	72.0	39.0%
Oa	Oaklimeter silt loam, 0 to 2 percent slopes, occasionally flooded, north	39.8	21.6%
Totals for Area of Interest		184.7	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it

was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Madison County, Mississippi

CbA—Calloway silt loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: m28m
Elevation: 10 to 430 feet
Mean annual precipitation: 53 to 62 inches
Mean annual air temperature: 61 to 66 degrees F
Frost-free period: 250 to 310 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Calloway and similar soils: 90 percent
Minor components: 3 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Calloway

Setting

Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loess deposits

Typical profile

H1 - 0 to 25 inches: silt loam
H2 - 25 to 64 inches: silt loam
H3 - 64 to 68 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 18 to 28 inches to fragipan
Drainage class: Somewhat poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 12 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C/D
Ecological site: F134XY004AL - Northern Moderately Wet Loess Interfluvium,
F134XY008AL - Northern Moderately Wet Loess Terrace - PROVISIONAL
Hydric soil rating: No

Minor Components

Unnamed hydric soils (134de)

Percent of map unit: 3 percent
Landform: Depressions

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Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Gb—Gillsburg silt loam

Map Unit Setting

National map unit symbol: m28p
Elevation: 10 to 620 feet
Mean annual precipitation: 60 to 75 inches
Mean annual air temperature: 64 to 70 degrees F
Frost-free period: 270 to 335 days
Farmland classification: Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season

Map Unit Composition

Gillsburg and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Gillsburg

Setting

Landform: Flood plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Silty alluvium deposits

Typical profile

H1 - 0 to 4 inches: silt loam
H2 - 4 to 42 inches: silt loam
H3 - 42 to 65 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 2.00 in/hr)
Depth to water table: About 12 to 24 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 11.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B/D

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Ecological site: F134XY019AL - Northern Moderately Wet Alluvial Flat -
PROVISIONAL, F134XY101MS - Southern Rolling Plains Loess Drainways -
PROVISIONAL
Hydric soil rating: No

Minor Components

Unnamed hydric soils (134de)

Percent of map unit: 10 percent
Landform: Depressions
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

LoB2—Loring silt loam, 2 to 5 percent slopes, moderately eroded, central

Map Unit Setting

National map unit symbol: 2x0tr
Elevation: 170 to 660 feet
Mean annual precipitation: 52 to 58 inches
Mean annual air temperature: 60 to 66 degrees F
Frost-free period: 180 to 290 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Loring and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Loring

Setting

Landform: Loess hills
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Noncalcareous loess

Typical profile

Ap - 0 to 5 inches: silt loam
Bt - 5 to 27 inches: silty clay loam
Btx - 27 to 56 inches: silt loam
C - 56 to 80 inches: silt loam

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: 27 to 33 inches to fragipan
Drainage class: Moderately well drained

Custom Soil Resource Report

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)

Depth to water table: About 24 to 28 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 5.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C

Ecological site: F134XY012AL - Northern Loess Fragipan Upland - PROVISIONAL, F134XY013AL - Northern Loess Fragipan Terrace - PROVISIONAL

Hydric soil rating: No

Minor Components

Providence

Percent of map unit: 5 percent

Landform: Loess hills

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Interfluve, base slope

Down-slope shape: Convex

Across-slope shape: Linear

Ecological site: F134XY012AL - Northern Loess Fragipan Upland - PROVISIONAL, F134XY013AL - Northern Loess Fragipan Terrace - PROVISIONAL

Hydric soil rating: No

Memphis

Percent of map unit: 3 percent

Landform: Terraces, interfluves

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Side slope, riser

Down-slope shape: Linear

Across-slope shape: Linear, convex

Ecological site: F134XY003AL - Northern Loess Interfluve, F134XY007AL - Northern Loess Terrace - PROVISIONAL

Hydric soil rating: No

Grenada

Percent of map unit: 1 percent

Landform: Stream terraces

Landform position (two-dimensional): Shoulder

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Linear

Ecological site: F134XY012AL - Northern Loess Fragipan Upland - PROVISIONAL, F134XY013AL - Northern Loess Fragipan Terrace - PROVISIONAL

Hydric soil rating: No

Byram

Percent of map unit: 1 percent

Landform: Loess hills

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Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Concave
Across-slope shape: Linear
Ecological site: F134XY012AL - Northern Loess Fragipan Upland - PROVISIONAL
Hydric soil rating: No

LoC2—Loring silt loam, 5 to 8 percent slopes, moderately eroded, central

Map Unit Setting

National map unit symbol: 2x0ts
Elevation: 170 to 660 feet
Mean annual precipitation: 52 to 69 inches
Mean annual air temperature: 57 to 70 degrees F
Frost-free period: 180 to 290 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Loring and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Loring

Setting

Landform: Loess hills
Landform position (two-dimensional): Shoulder, summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Noncalcareous loess

Typical profile

Ap - 0 to 5 inches: silt loam
Bt - 5 to 24 inches: silty clay loam
Btx - 24 to 48 inches: silt loam
C - 48 to 65 inches: silt loam

Properties and qualities

Slope: 5 to 8 percent
Depth to restrictive feature: 23 to 27 inches to fragipan
Drainage class: Moderately well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C/D
Ecological site: F134XY012AL - Northern Loess Fragipan Upland -
PROVISIONAL
Hydric soil rating: No

Minor Components

Memphis

Percent of map unit: 4 percent
Landform: Interfluves, terraces
Landform position (two-dimensional): Shoulder, summit
Landform position (three-dimensional): Side slope, crest, riser
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F134XY003AL - Northern Loess Interfluve
Hydric soil rating: No

Grenada

Percent of map unit: 2 percent
Landform: Stream terraces
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F134XY012AL - Northern Loess Fragipan Upland - PROVISIONAL
Hydric soil rating: No

Providence

Percent of map unit: 2 percent
Landform: Loess hills
Landform position (two-dimensional): Shoulder, summit
Landform position (three-dimensional): Interfluve, base slope
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F134XY012AL - Northern Loess Fragipan Upland - PROVISIONAL
Hydric soil rating: No

Smithdale

Percent of map unit: 1 percent
Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Byram

Percent of map unit: 1 percent
Landform: Loess hills
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Concave
Across-slope shape: Linear

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Ecological site: F134XY012AL - Northern Loess Fragipan Upland - PROVISIONAL
Hydric soil rating: No

Oa—Oaklimeter silt loam, 0 to 2 percent slopes, occasionally flooded, north

Map Unit Setting

National map unit symbol: 2x0th
Elevation: 110 to 390 feet
Mean annual precipitation: 54 to 59 inches
Mean annual air temperature: 59 to 65 degrees F
Frost-free period: 165 to 290 days
Farmland classification: Prime farmland if protected from flooding or not frequently flooded during the growing season

Map Unit Composition

Oaklimeter and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Oaklimeter

Setting

Landform: Alluvial flats, flood plains
Landform position (three-dimensional): Talf, rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Silty alluvium

Typical profile

Ap - 0 to 6 inches: silt loam
Bw - 6 to 27 inches: silt loam
EBb - 27 to 52 inches: silt loam
Btgb - 52 to 70 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very high (about 13.6 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C

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Ecological site: F134XY018AL - Northern Alluvial Flat - PROVISIONAL

Hydric soil rating: No

Minor Components

Ariel

Percent of map unit: 4 percent

Landform: Flood plains, alluvial flats

Landform position (three-dimensional): Rise

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: F134XY018AL - Northern Alluvial Flat - PROVISIONAL

Hydric soil rating: No

Gillsburg

Percent of map unit: 4 percent

Landform: Flood plains, alluvial flats

Landform position (three-dimensional): Dip

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: F134XY019AL - Northern Moderately Wet Alluvial Flat - PROVISIONAL

Hydric soil rating: No

Rosebloom

Percent of map unit: 2 percent

Landform: Flood plains, alluvial flats

Landform position (three-dimensional): Dip

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: F134XY020AL - Northern Wet Alluvial Flat - PROVISIONAL

Hydric soil rating: Yes

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