AI: 55445

Rec'd via email: 10/24/2024

MAJOR MODIFICATION FORM FOR LARGE CONSTRUCTION GENERAL PERMIT

Coverage No. MSR10 7189 ____ County Madison

INSTRUCTIONS

Coverage recipients shall notify the Mississippi Department of Environmental Quality (MDEQ) at least 30 days in advance of the following activities (check all that apply). This form should be submitted with a modified Storm Water Pollution Prevention Plan (SWPPP), updated USGS topographic map, Corps of Engineers Section 404 documentation and wastewater collection and treatment information, as appropriate.

- [x] **SWPPP details have been developed and are being submitted for MDEQ review for subsequent phases of an existing project.**
- [ ] **"Footprint" identified in the original LCNOI is proposed to be changed.**

This form must be signed by the current coverage recipient under Mississippi's Large Construction General Permit. A different developer of new phases of existing subdivisions must apply for separate permit coverage through the submittal of a new complete LCNOI package. Coverage recipients are authorized to discharge storm water associated with proposed expansions of existing subdivisions or subsequent phases, under the conditions of the General Permit, only upon receipt of written notification of approval by MDEQ. All other modifications, such as changes of erosion and sediment controls used, must be in accordance with ACT6, S-1 (6) and S-2 (7) of the General Permit.

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

CURRENT COVERAGE RECIPIENT INFORMATION

COVERAGE RECIPIENT CONTACT NAME: J. Blake Cress PHONE # (601) 427-9996

COMPANY NAME: Stillhouse Creek, LLC

STREET OR P.O. BOX: PO Box 1260

CITY: Ridgeland STATE: MS ZIP: 39110 E-MAIL: blake@cresscre.com

IS THE APPLICANT DIFFERENT FROM THE CURRENT COVERAGE HOLDER? ☐ YES ☑ NO

PREPARER/CONSULTANT INFORMATION

(Complete if prepared by someone other than applicant.)

PREPARER/CONSULTANT CONTACT NAME: Clay Cromwell PHONE # (601) 415-7485

COMPANY NAME: Headwaters, Inc.

STREET OR P.O. BOX: PO Box 2836

CITY: Ridgeland STATE: MS ZIP: 39158 E-MAIL: clay@headwaters-inc.com

MAY MDEQ CORRESPOND DIRECTLY WITH THE PREPARER / CONSULTANT REGARDING THE PROPOSED PROJECT / MODIFICATION? ☑ YES ☐ NO

SITE INFORMATION

PROJECT NAME: Woodscape of Oakfield, Phase 6

CITY: Canton TRIBAL LAND ID (N/A If not applicable): N/A

Latitude / Longitude Collected at Project Entrance or Construction Start Point:

LATITUDE: 32 degrees 30 minutes 13 seconds LONGITUDE: 90 degrees 3 minutes 22 seconds

LAT & LONG COLLECTION METHOD (e.g., GPS, Map Interpolation): Google Earth

REDUCTION IN ACREAGE: ____ ADDITIONAL ACREAGE TO BE DISTURBED: 18.14

TOTAL PROJECT ACREAGE: 141.94 ESTIMATED CONSTRUCTION END DATE: 9/01/2025

o.c

IS THE PROJECT REROUTING, FILLING OR CROSSING A WATER CONVEYANCE OF ANY KIND? (If yes, contact the U.S. Army Corps of Engineers' Regulatory Branch for permitting requirements.) ☑ YES ☐ NO

IF THE PROJECT IS A SUBDIVISION OR A COMMERCIAL DEVELOPMENT, HOW WILL SANITARY SEWAGE BE DISPOSED? Check one of the following and attach the pertinent documents.

☑ Existing Municipal or Commercial System. Please attach plans and specifications for the collection system and the associated "Information Regarding Proposed Wastewater Projects" form or approval from County Utility Authority in Hancock, Harrison, Jackson, Pearl River and Stone Counties. If the plans and specifications cannot be provided at the time of LCNOI submittal, MDEQ will accept written acknowledgement from official(s) responsible for wastewater collection and treatment that the flows generated from the proposed project can and will be transported and treated properly. The letter must include the estimated flow.

☐ Collection and Treatment System will be Constructed. Please attach a copy of the cover of the NPDES discharge permit from MDEQ or indicate the date the application was submitted to MDEQ (Date: _____.)

☐ Individual Onsite Wastewater Disposal Systems for Subdivisions Less than 35 Lots. Please attach a copy of the Letter of General Acceptance from the Mississippi State Department of Health or certification from a registered professional engineer that the platted lots should support individual onsite wastewater disposal systems.

☐ Individual Onsite Wastewater Disposal Systems for Subdivisions Greater than 35 Lots. A determination of the feasibility of installing a central sewage collection and treatment system must be made by MDEQ. A copy of the response from MDEQ concerning the feasibility study must be attached. If a central collection and wastewater system is not feasible, then please attach a copy of the Letter of General Acceptance from the State Department of Health or certification from a registered professional engineer that the platted lots should support individual onsite wastewater disposal systems.

INDICATE ANY LOCAL STORM WATER ORDINANCE WITH WHICH THE PROJECT MUST COMPLY:

Madison County and City of Gluckstadt

NEAREST NAMED RECEIVING STREAM: Little Bear Creek

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 on MDEQ's web site: https://www.mdeq.ms.gov/water/surface-water/tmdl/ ☑ YES ☐ NO

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

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.

J. Blake Cress
Signature (must be signed by coverage recipient)

10/23/24
Date

J. Blake Cress
Printed Name

Managing Member
Title

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

Electronically: https://www.mdeq.ms.gov/construction-stormwater/

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

LARGE CONSTRUCTION STORM WATER GENERAL NPDES PERMIT

for

Stillhouse Creek, LLC
Woodscape of Oakfield Phase 6

Madison County, Mississippi

October, 2024

PREPARED BY:

Headwaters, Inc.
P. O. Box 2836
Ridgeland, Mississippi 39158
(601) 634-0097

HEADWATERS

TABLE OF CONTENTS

I. INTRODUCTION

The purpose of the Storm Water Pollution Prevention Plan (SWPPP) is to provide a site-specific description of the best management practices to prevent contamination of the site storm water flows from potential pollutants associated with construction activities. The SWPPP has been prepared for Stillhouse Creek, LLC and the proposed Woodscape of Oakfield Development, Phase 6, as required by the Mississippi Department of Environmental Quality (MDEQ) in compliance with the applicable regulations for coverage under the Large Construction Storm Water General NPDES Permit. Headwaters, Inc. has developed this SWPPP to be incorporated into the routine construction activities associated with the proposed site development plans. The potential sources of pollution have been identified at the site and are described in the plan. Several pollution control measures are specified in the plan to prevent contamination of storm water runoff from those sources. The plan also outlines implementation, inspection, and maintenance requirements. The erosion and sediment control practices should be monitored, and the plan revised if the quality of storm water runoff is not satisfactory.

II. SITE ASSESSMENT

A. **Location**: The site is located within Section 26, Township 8 North, Range 2 East, Madison County, Mississippi. The subject property is also referenced by Global Positioning System (GPS) N 32.503600°and –W90.056301°. The subject property includes an approximate 20.91-acre parcel, that will include 18.14-acres of disturbance within the project boundary, to complete a planned residential development considered as Woodscape of Oakfield Development, Phase 6. Access to the property granted via Willow Way along the southwest boundary, the access will integrate into the previous phase located to the west. (Appendix I).

B. **Soils:** The site contains Byram silt loam, 2 to 5 percent slopes eroded (BrB2), Ariel silt loam (Ar), and Byram silt loam, 5 to 8 percent slopes, eroded (BrC2), (Appendix II).

C. **Description of Work**: Stillhouse Creek, LLC is now proposing to improve their approximately 20.91 acres parcel of land with residential development lots and infrastructure. The 20.91-acre parcel is considered Woodscape of Oakfield Phase 6. The planned development includes single family residential house lots, roads, storm water retention, common areas, and utilities.

The planned development activities will include the construction of +/- 20.91 single family residential house lots as part of a planned development. The proposed project will also include the construction of interior roads/streets and utilities as a part of the planned development activities. The roads will include a curb and gutter underground drainage system to facilitate storm water runoff

generally through the development into one (1) planned wet retention basin located within the northwest portion of the subject property. The basin has been designed in accordance with the MDEQ Specific Design Criteria and the City of Gluckstadt, Mississippi storm water management requirements by McMaster & Associates, Inc. included within this report.

Construction Methodology:
The construction activities will consist of site grading sub surface drainage, utilities, interior roads, retention basin, and lot development within the overall 20.91-acre parcel. The construction sequence will therefore include initial site grading, construction of the retention basin, which will be used as a detention basin during construction, roads, utilities, and lot development. Post construction will include the completion of the wet retention basin and landscaping. Each individual lot will be sold from Stillhouse Creek, LLC to others for development. Stillhouse Creek, LLC will require that each lot owner prepare the applicable Registration Form for Residential Lot Coverage under Mississippi's Large Construction Storm Water General Permit. Post construction storm water management is supported by Stillhouse Creek, LLC and the management of the basin located to the northeast.

Construction Access**:**
Stillhouse Creek, LLC plans to utilize a construction access point along the southwest boundary of the property extending from Willow Way, the access will integrate into the previous phase located to the west. The construction access will be constructed as part of the initial phases of construction and will be maintained for the entire project.

Temporary Sediment Basin:
Sediment Basin (Temporary Practice) – A temporary sediment basin will be used during construction as shown on the erosion control plan. The temporary sediment basin is located down gradient from the construction activities and upgradient from the receiving stream. A stone filter ring and faircloth skimmer will be used to allow a top water discharge from the temporary sediment basin (see details).

The sediment basin is designed to accept storm water runoff from the site where it will be detained in accordance with City of Gluckstadt and MDEQ storm water management requirements. The basin has been designed to retain surface water runoff and sediment utilizing a faircloth skimmer. The maintenance plan will include the removal of accumulated sediment outside of the stone filter ring when the basin reaches 50% capacity or sooner.

General Storm Water Management Plan:
The storm water and erosion control design will include the utilization of a detention basin within the northwest portion of the development. All storm

water runoff will be directed via overland flows and subsurface flows to the detention basin during the construction phase of the project. Maintenance of the site would include the removal of all accumulated sediments from the detention basin with all materials placed in a secure location, similarly, protected with erosion controls. Secondly, perimeter erosion controls to prevent any secondary movement of sediment off site will be completed. Upon the completion of the construction phase, the detention basin will be cleaned and sized in accordance with the City of Gluckstadt, Mississippi and the MDEQ Storm Water Quality Criteria. Upon the completion of the project, storm water will be directed via overland flows within lots and green spaces, subsurface flows within the curb and gutter system to the wet retention basin. Storm water runoff would then be detained in accordance with City of Gluckstadt and MDEQ Storm Water Quality Criteria.

D. **Potential Pollution Sources**: The most significant potential pollutants are soil particles subject to removal by storm water. Other potential pollutants subject to removal by storm water are spilled fuel and lubricants. Material may also be inadvertently tracked off-site or blown off-site when distributed by hauling equipment. The storm water which leaves the site shall meet the non-numeric limitations of being free from oil, scum, debris and other floating materials; eroded soils and other materials that will settle out of the storm water to form objectionable deposits in receiving waters; suspended solids, turbidity and color levels inconsistent with the receiving waters; chemicals in concentrations that would cause violations of the State Water Quality Criteria in the receiving waters.

E. **Non-Storm Water Solid Materials**: The on-site generation of solid materials will be minimal, and its proper disposal will be closely monitored. All solid waste will be taken off-site for proper disposal.

F. **Drainage Patterns**: Based upon our field assessments, storm water drainage on the subject property can be considered relatively good with storm water runoff flowing generally to the west. Storm water that leaves the site is conveyed through the retention area designed within the northwest portion of the site. Surface water will continue through unnamed tributaries of Bear Creek, located to the north of the site. Bear Creek continues to flow north and northwest until its confluence with the Big Black River in north Madison County, Mississippi.

G. **Receiving Waters / Established TMDLs**: As mentioned, the project site is relatively confined to one (1) watershed referenced as the Little Bear Creek watershed. In accordance with the MDEQ 2022 303 (d) list of impaired streams, the nearest stream segment that is considered impaired is Little Bear Creek Waterbody ID 105712 for Biological Impairment. This stream reach is located east of U.S. Interstate 55, south of Yandell Road, and south of the City of Canton, Madison County, Mississippi. More specifically, this watershed is referenced as

TMDL Drainage Area MS431BE located within the Big Black River Basin.

During construction, surface water from the project site will be conveyed to the north via overland flows and sub surface drainage improvements into the detention basin within the northeast portion of the site. Surface water that flows via overland flows will also be treated through the green space and temporary erosion controls along the permitter of the site. With this said, the perimeter controls include temporary silt fencing along the north and east boundaries to again provide multiple erosion controls through each facet of the site.

The intermittent temporary erosion controls and the presence and maintenance of the detention basin within the watershed will provide initial and long-term protection from adverse impacts to the downstream resources. The planned erosion controls and post construction management plan are considered consistent with the TMDL's reference for Bear Creek located downstream from the project site. It should also be mentioned that the listed stream reach is approximately +/- 2 miles to the northeast from our project site. Given this, the project site is not expected to cause or contribute to exceedances of the water quality standards in the receiving streams.

H. **Wetlands:** Headwaters, Inc. conducted a wetland and other waters assessment on a larger tract of land containing the Woodscape of Oakfield Phase 6 boundaries. An approved jurisdictional determination (AJD) was obtained from the USACE Vicksburg District covering the project boundaries on November 18, 2020, attached in Appendix IIV. Given the planned impacts to the "wetlands and other waters of the United States" a USACE, Nationwide Permit No. 29 was acquired on January 3, 2024, referenced as MVK 2021 640. A copy of the Nationwide Permit is attached in Appendix IIV. Please note that this permit covered additional phases of this project.

III. BEST MANAGEMENT PRACTICES (BMPs)

A. **Erosion and Sediment Control:** Construction activities shall not cause more than minimal and temporal water quality degradation of any adjacent jurisdictional wetlands, streams, or water body. Appropriately chosen and installed erosion and sediment control BMPs will be used to prevent sediment from leaving the site. All BMPs implemented for the site will be in accordance with the standards set forth in the most current edition of the MDEQ "Planning and Design Manual for the Control of Erosion, Sediment and Storm Water. The contractor will be responsible for installing, inspecting, and maintaining the erosion and sediment controls for the duration of the project until final stabilization of the site is achieved. The site plan found in Appendix III will detail where each BMP will be used. Additional control measures could include but are not limited to the use of secured sediment/silt fencing, wooden or vinyl barriers and/or seeding or sodding of exposed or disturbed areas.

B. Structural Practices:

- Construction Entrance/Exit (Temporary Practice) – There will be one (1) construction entrance, located along the northwest side of the site and extending to Willow Way, the access will integrate into the previous phase located to the north. Aggregate should be at least six (6) inches thick and 50 feet long using DOT #1 coarse aggregate. The entrances will be inspected weekly and periodic top dressing with new gravel may be necessary when it becomes clogged with dirt and/or debris to prevent the tracking of mud and dirt onto the roadway. In addition, dirt and debris that accumulates on the roadway should be removed **immediately**. The GP interprets **immediately to mean no later than the next workday.**

- Silt Fence (Temporary Practice) – Silt fence will be installed as shown on the site plan. It will be placed between the area to be disturbed and potential discharge locations or deemed necessary once construction begins. The fence will be maintained, and the sediment will be removed when the deposits reach **one third to one-half** the fence height. Silt fence used must be trenched into the ground a minimum of six (6) inches. All removed sediment deposits shall be properly disposed within the project site and in accordance with this plan. We are considering a double row silt fence along the east boundary of the site to achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

- Hay Wattles (Temporary Practice) – Wattles will be installed as shown on the site plan. They will be placed between the area to be disturbed, the wetland areas and stream crossings as needed and at any other locations deemed necessary once construction begins. Sediment will be removed when it reaches one half (1/2) the height of the barrier. Straw wattle must be at minimum eighteen (18) inches in diameter.

- Stone Filter Ring (Temporary Practice) – There will be one (1) stone filter ring installed within the temporary detention basin as shown on the erosion control plan. The filter ring will be removed after the construction phase is completed and all exposed soils have been grassed.

- Rip-Rap – Riprap will be installed as shown on the site plan. The riprap will serve as an erosion control method outside of the pipe outlets. Installation for the riprap can be found within the design plans.

- Fueling and Vehicle Maintenance Locations - Fueling and vehicle maintenance areas shall use BMP's for industrial activities to ensure that pollutants do not impact the storm water runoff. Impervious dikes and

berms shall be used to contain potential spills. Drums and containers for holding and transporting contaminated materials should be on site.

C. Vegetative Practices:

- Temporary Seeding (Temporary Practice) – Soil stabilization-vegetative stabilization measures must be initiated whenever any clearing, grading, grubbing, excavation, or other land disturbing activities have temporarily or permanently ceased on any portion of the site and will not resume for a period of fourteen (14) calendar days or more. The appropriate temporary or permanent vegetative practices shall be initiated immediately. **MDEQ defines immediately to mean no later than the next workday.**

- Permanent Seeding The vegetative practices should be fertilized at one-half the initial rates at the beginning of the second growing season. Eroded areas should be shaped, smoothed, and replanted at this time. See the MDEQ SWPPP Guidance Manual for seeding, mulching and fertilizing rates. All seed mix considered would be selected from the MDEQ approved listing which is included in this report. Topsoil will be stockpiled and used in areas that will be re-vegetated. In areas where heavy equipment is utilized the top four (4) inches of the soil bed will be tilled or prepped before revegetation.

- Dust Control - Dust will be controlled as much as possible during construction by temporary seeding and spraying with water. The construction accesses shall be stabilized and monitored during high traffic times to minimize the dust on construction roads.

D. Spill Prevention and Response Procedures: If single wall tanks are used, then secondary containment measures shall be implemented. Double-wall tanks do not require secondary containment measures. If on-site above ground oil storage (gasoline, diesel, hydraulic, transformer, etc.) exceeds either 660 gallons in a single container or exceeds 1,320 gallons in aggregate storage, a SPCC plan would be required.

E. Operation and Maintenance: The best management practices and outfalls/discharge points must be properly installed and maintained as designed and inspected after rain events that produce a discharge and at least weekly for a minimum of four (4) inspections per month. Any poorly functioning erosion or sediment controls, non-compliant discharges, or any other deficiencies observed during the inspections shall be corrected as soon as possible, but not to exceed 24 hours of the inspection unless prevented by unsafe weather conditions as documented on the inspection form.

F. Record Keeping: Records shall be retained for three (3) years of all maintenance

activities, spills, and inspections, including a description of the quality and quantity of storm water.

G. Employee Training: The Permittee understands the requirements of the GP as it pertains to installation, routine maintenance, corrective action, and weekly inspections and will make sure that their contractors understand the need for Permit compliance in accordance with General Permit Act5 T-20 and T-21. Preconstruction training with all on-site workers is required to discuss the requirements and responsibilities of all environmental permitting required by the project. A training roster must be signed and maintained on site. All employees joining the project after the initial meeting must receive the environmental training and sign the roster.

H. Housekeeping Practices: Pollutants that may enter storm water from construction sites because of poor housekeeping include oils, grease, paints, gasoline, solvents, litter, debris, and sanitary waste. During construction activities, the contractor is required to:

- designate areas for equipment maintenance and repair
- provide waste receptacles at convenient locations and provide regular collection of waste
- provide protected storage areas for chemicals, paints, solvents, fertilizers, and other potentially toxic materials
- provide adequately maintained sanitary facilities
- designate an area for concrete truck wash off.
- streets will be swept as needed to remove sediment or other debris that has been tracked from construction site. **No later than the next workday.**
- sediment or other pollutants will be periodically removed from control measures when deposits reach one-third to one-half the height of the control, conveyance channels, or storm drain inlets.
- All removed sediment deposits shall be properly disposed of in accordance with this plan. Nonfunctioning controls shall be repaired, replaced or supplemented with functioning controls within twenty – four (24) hrs of discovery or as soon as field conditions allow.

IV. CONSTRUCTION SEQUENCE

Below is the construction sequence for this project. This sequence could change depending on the sequence of letting bids, contracting, etc. The construction sequence will be updated if changes occur.

1. Obtain plan approval and all other permits as needed.
2. Have a pre-construction conference to review all needed BMPs. Include the completion of the SWPPP employee training lot documents.
3. Begin minor clearing to install stabilized construction entrances at initial points

of egress, construct sediment basins and perimeter controls.

4. Control measures should be installed to coincide with subsequent construction activities and at the time they are deemed to be most effective.
5. Begin major clearing and grubbing operations after key sediment controls are installed.
6. Install temporary diversions, where applicable, along steep cleared and grubbed slopes to divert runoff toward silt basins or other controls.
7. Install sub surface and surface drainage improvements.
8. Install utilities and interior access roads.
9. Complete temporary stabilization of lots and along access roads.
10. Perform weekly reviews of site conditions along with erosion and sediment practices to ensure compliance with the SWPPP. Inspection reports will be kept on site with an updated SWPPP.
11. Perform any temporary seeding as needed and instructed throughout the construction process.
12. Final grading, seeding, sodding, mulching, and fertilizing.
13. Ensure final stabilization is achieved within the project site.
14. Removal of any temporary measures.

V. IMPLEMENTATION SCHEDULE

A. **Structural Measures**: The non-existing structural measures shall be installed as the weather permits, and the existing measures shall be re-conditioned as well. General implementation principles are:

1. Install down-slope and perimeter controls before other site work
2. build sediment basin before major site grading
3. divert upslope water around area before major site grading
4. do not disturb an area until it is necessary
5. time construction activities to limit impact from seasonal weather
6. cover or stabilize disturbed area as soon as possible
7. do not remove temporary controls until after site stabilization
8. The permittee shall limit clearing, excavation, and the placement of fill materials to areas essential to the project. The remainder of the property shall be left in its natural state.

B. **Proof of Coverage**: A copy of the Large Construction Storm Water General Permit certificate and a copy of the Storm Water Pollution Prevention Plan should be kept onsite or locally available. Copies of these documents are provided in the Appendix.

VI. INSPECTIONS AND REPORTING

A. Inspections: Inspections of the best management practices and other storm water pollution prevention plan requirements shall be performed as follows:

1. At least weekly for a minimum of four (4) inspections per month,
2. After any rain event that produces a discharge, and
3. As often as necessary to ensure that appropriate erosion and sediment controls have been properly implemented and maintained.

The minimum inspection requirement in no way relieves the permittee of performing whatever inspections are needed to insure safe and pollution free facility operation. Any poorly functioning erosion controls or sediment controls, non-compliant discharges, or any other deficiencies observed during the inspections required under this permit shall be corrected as soon as possible, but not to exceed 24 hours of the inspection unless prevented by unsafe weather conditions as documented on the inspection form.

1. **Reporting**: The owner and/or contractor must inspect, as described in above section, and maintain controls and prepare weekly reports noting damages or deficiencies and corrective measures. These inspection reports are kept on-site until the Request for Termination (RFT) form is submitted.

   As previously stated, all records, reports and information resulting from activities required by this plan and your permit coverage shall be retained for at least three (3) years from the date of the CNOI, inspection, or report.

   A rain gauge shall be placed in a central location on the site and used to obtain rainfall amounts. This information will be needed for proper completion of the inspection report.

VII. REVISIONS

The storm water pollution prevention plan will be kept current by the company representative and will be revised as changes in site conditions warrant. The company representative may notify the SWPPP developer for assistance when necessary. Factors that would compel the SWPPP to be modified include:

- Inadequacies revealed by routine inspections.
- Changes in identified sources, non-storm water discharges or non-storm water solid wastes.
- Office of Pollution Control notification that the plan does not meet one or more of the minimum requirements.
- Changes in design, construction, operation, or maintenance, which has affected the discharge of pollutants to waters of the State, and which were not otherwise addressed in the SWPPP.
- Identification of any new contractor and/or subcontractor that will implement a measure of the SWPPP.
- Install additional erosion and sediment controls when existing controls prove to

be ineffective.

A plan revision will be completed within 30 days of the date if determined that a revision is warranted. If the modification is in response to a request by the Office of Pollution Control, the permittee must submit to the OPC certification that the requested changes have been made.

VIII. TERMINATION OF COVERAGE

Within thirty (30) days of final stabilization, the Office of Pollution Control must be notified by a completed Request for Termination (RFT) of Coverage form (copy provided). MDEQ staff will inspect the site and if no sediment or erosion problems are identified and adequate permanent controls are established, the owner or operator will receive a termination letter. Coverage is not terminated until notified in writing by MDEQ.

IX. POST CONSTRUCTION MAINTENANCE

a. **Management**: Stillhouse Creek, LLC, per Large Construction General Permit for land disturbing activities of five or more acres, will remain responsible for compliance with this general permit until a new owner or operator satisfies the requirements of S-5 (Residential Subdivision – Individual Lots) of this act. Referencing S-5 of MDEQ Large Construction General Permit, Individual lots or parcels within a residential subdivision that are part of the "larger common plan of development or sale" are regulated regardless of size or owner. If the owner or developer obtains construction permit coverage for a residential development, then sells individuals lots within that development, permit coverage shall continue on those lots under new ownership. The original coverage recipient may retain responsibility for permit compliance, or the new owner (purchaser) or operator shall satisfy authorization requirements by; completing and submitting the MDEQ Registration Form and developing and implementing a sediment and erosion control plan for the specific lots or, completing and submitting for approval form from the MDEQ, a LCNOI and required documents or, applying for an individual permit.

b. **Maintenance Plan**: As part of the maintenance plan, Stillhouse Creek, LLC will complete post construction inspections and maintenance of the site, curb and gutter systems, drainage systems, retention systems and structures on a monthly basis, or as necessary, to ensure all infrastructure and controls remain stable and functioning in accordance with the City of Gluckstadt and MDEQ regulations. Upon individual lots being bought by other owners, the responsibility will then transfer to that of the new owners.

c. **Adaptive Management Plan:** Upon the identification of a deficiency, the management company shall develop a plan to correct the deficiency.

Consultation with McMaster & Associates, Inc. and/or Headwaters, Inc. may be considered as it relates to a design and regulatory authority. In general, the requirement of the management company will include the mitigation of the deficiency to ensure that the functions of the storm water management systems remain functioning as designed.

X. APPENDIX I – LOCATION MAPS

HEADWATERS
www.headwaters-inc.com

Date Created: 10/22/2024 | Created by: MTM

Stillhouse Creek, LLC
Woodscape of Oakfield Phase 6
Sec.26 - T 8N - R 2E
Madison County, Mississippi
Site Location Map

0 1,125 2,250 Feet
1:25,000

N

NAD 1983 2011 StatePlane Mississippi West FIPS 2302 Ft US

USDA NAIP 2023 Imagery Basemap

HEADWATERS
www.headwaters-inc.com

Date Created: 10/22/2024 | Created by: MTM

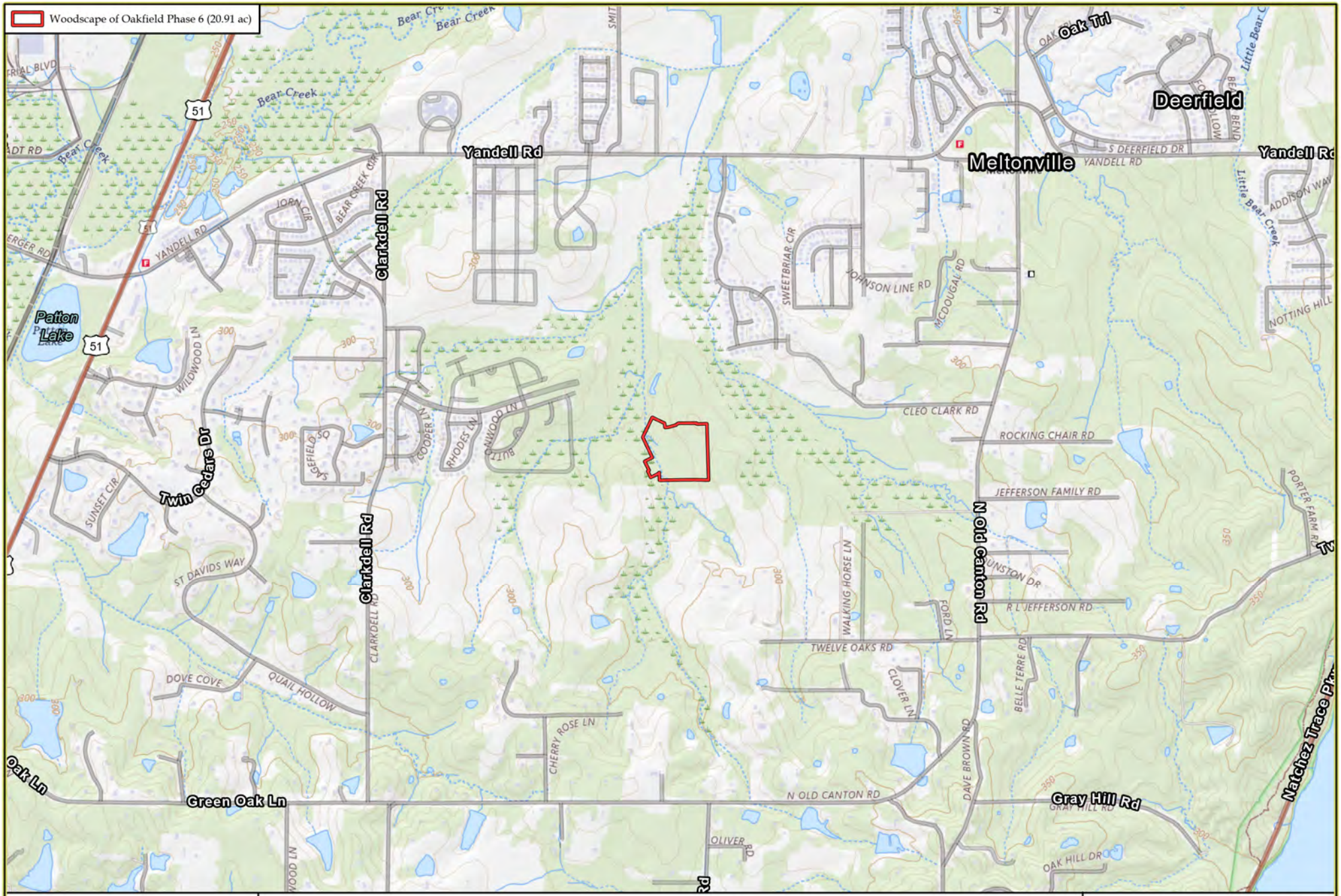
Stillhouse Creek, LLC
Woodscape of Oakfield Phase 6
Sec.26 - T 8N - R 2E
Madison County, Mississippi
Site Location Map

0 90 180 Feet
1:2,000

N

NAD 1983 2011 StatePlane Mississippi West FIPS 2302 Ft US

USDA NAIP 2023 Imagery Basemap



HEADWATERS
www.headwaters-inc.com

Date Created: 10/22/2024 | Created by: MTM

Stillhouse Creek, LLC
Woodscape of Oakfield Phase 6
Sec.26 - T 8N - R 2E
Madison County, Mississippi
Site Location Map

0 1,125 2,250 Feet
1:25,000

N

NAD 1983 2011 StatePlane Mississippi West FIPS 2302 Ft US

USGS Canton (MS) Quad Basemap

HEADWATERS
www.headwaters-inc.com

Date Created: 10/22/2024 | Created by: MTM

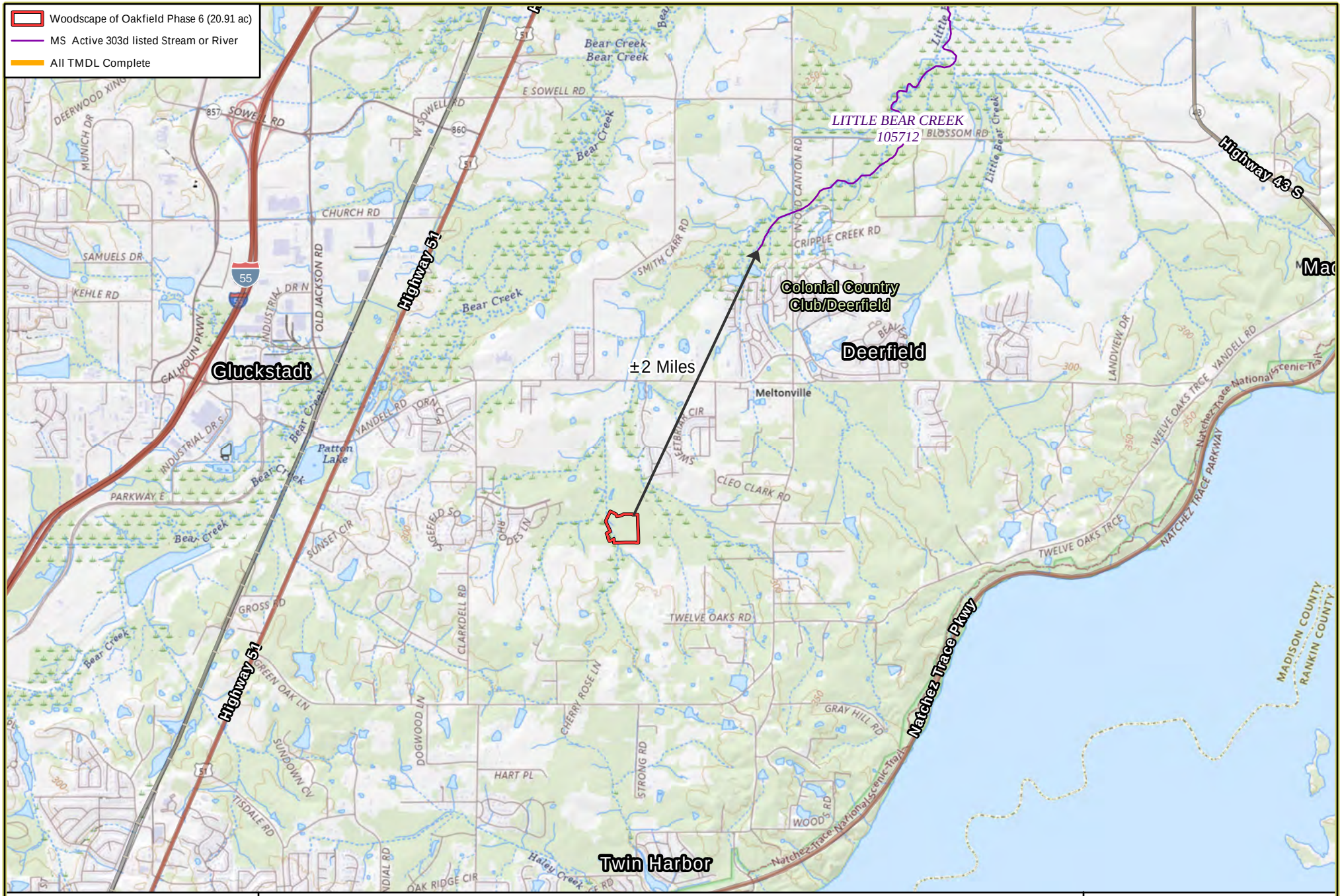
Stillhouse Creek, LLC
Woodscape of Oakfield Phase 6
Sec.26 - T 8N - R 2E
Madison County, Mississippi
Site Location Map

0 90 180 Feet
1:2,000

N

NAD 1983 2011 StatePlane Mississippi West FIPS 2302 Ft US

USGS Canton (MS) Quad Basemap



HEADWATERS
www.headwaters-inc.com

Date Created: 10/24/2024

Created by: MTM

Stillhouse Creek, LLC
Woodscape of Oakfield Phase 6
Sec.26 - T 8N - R 2E
Madison County, Mississippi
Impaired Waters Map

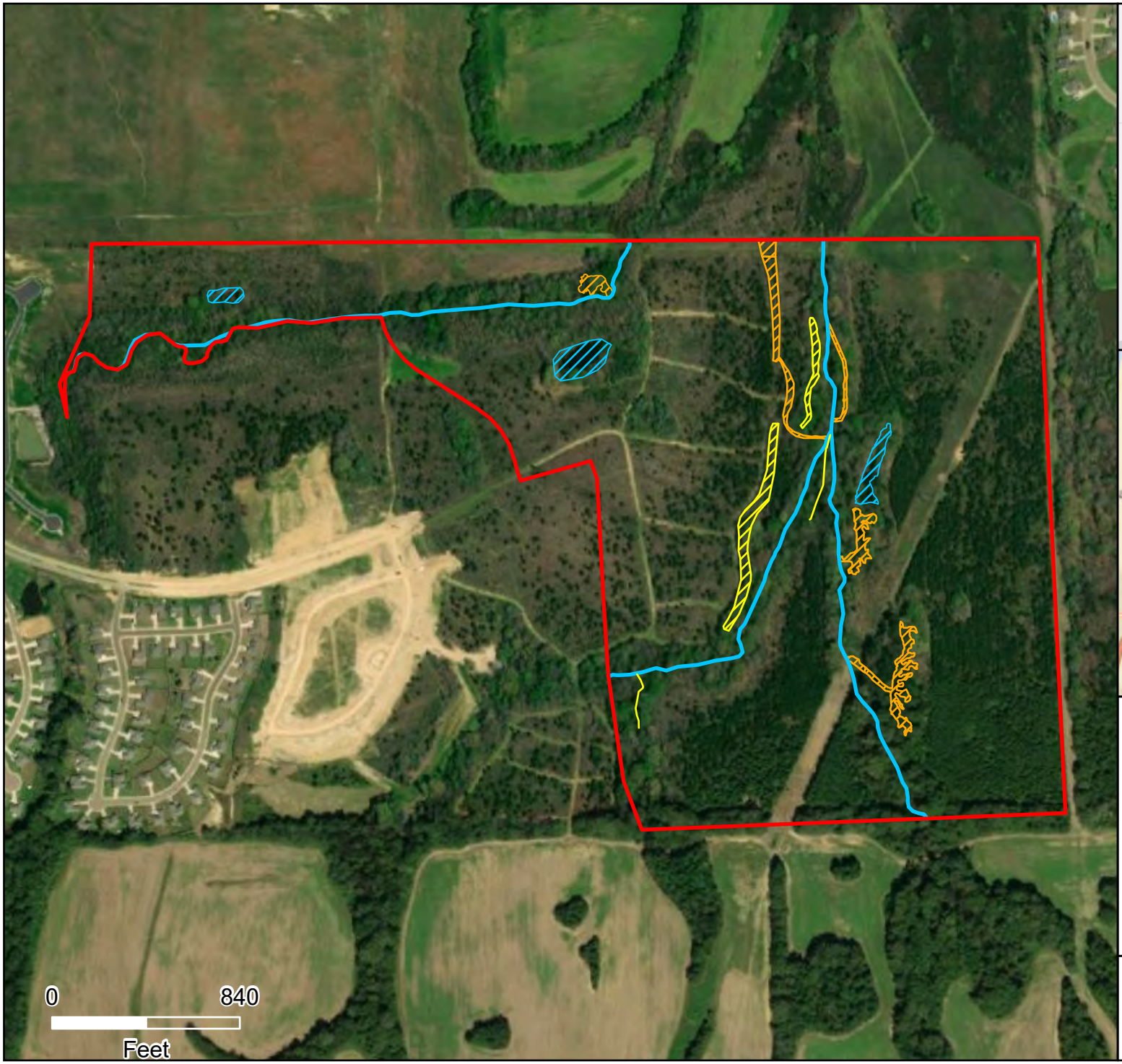
0 2,245 4,490 Feet

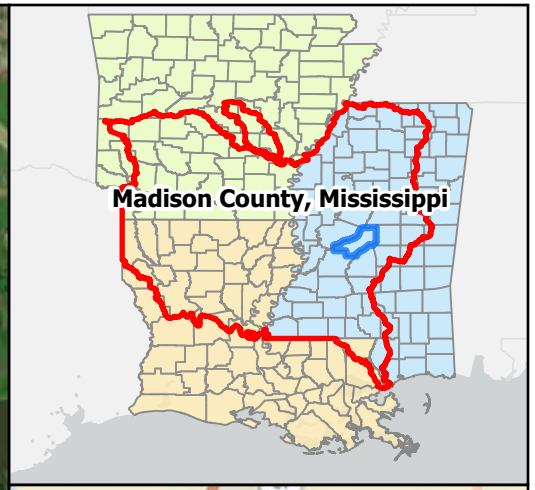
1:50,000

N

NAD 1983 2011 StatePlane Mississippi West FIPS 2302 Ft US

USGS Canton (MS) Quad Basemap





Legend

- Project Boundary
- Jurisdictional Intermittent Streams (7023.29 LF)
- Non-Jurisdictional Ephemeral Features (675.16 LF)
- Jurisdictional Wetlands (1.97 Acres)
- Non-Jurisdictional Wetlands (1.17 Acres)
- Non-Jurisdictional Ponds (1.14 Acres)

*There are jurisdictional waters of the United States within the project area. Any activity involving the discharge of dredged or fill material into said waters requires a permit.

N

MVK-2020-283
Stillhouse Creek LLC: Residential Development

AJD/PJD

18 November 2020
Bryton Hixson

X. APPENDIX II – SOILS 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 24, 2024

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.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

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

Map Scale: 1:2,670 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 35 70 140 210

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

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 19, Sep 6, 2024

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
Ar	Ariel silt loam	6.9	33.0%
BrB2	Byram silt loam, 2 to 5 percent slopes, eroded	8.0	38.1%
BrC2	Byram silt loam, 5 to 8 percent slopes, eroded	6.0	28.8%
Totals for Area of Interest		**20.9**	**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

Ar—Ariel silt loam

Map Unit Setting

National map unit symbol: m288
Elevation: 150 to 670 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: All areas are prime farmland

Map Unit Composition

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

Description of Ariel

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 5 inches: silt loam
H2 - 5 to 30 inches: silt loam
H3 - 30 to 65 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: About 24 to 36 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 11.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C
Ecological site: F134XY018AL - Northern Alluvial Flat - PROVISIONAL
Hydric soil rating: No

Minor Components

Unnamed hydric soils (134fp)

Percent of map unit: 10 percent
Landform: Flood plains
Landform position (three-dimensional): Talf

Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

BrB2—Byram silt loam, 2 to 5 percent slopes, eroded

Map Unit Setting

National map unit symbol: m28d
Elevation: 230 to 390 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

Byram and similar soils: 90 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Byram

Setting

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

Typical profile

H1 - 0 to 5 inches: silt loam
H2 - 5 to 20 inches: silt loam
H3 - 20 to 44 inches: silt loam
H4 - 44 to 56 inches: silty clay loam
H5 - 56 to 72 inches: silty clay

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: 16 to 24 inches to fragipan
Drainage class: Moderately well drained
Runoff class: Very high
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 12 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

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

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

BrC2—Byram silt loam, 5 to 8 percent slopes, eroded

Map Unit Setting

National map unit symbol: m28f
Elevation: 230 to 410 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: Farmland of statewide importance

Map Unit Composition

Byram and similar soils: 90 percent
Minor components: 2 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Byram

Setting

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

Typical profile

H1 - 0 to 5 inches: silt loam
H2 - 5 to 20 inches: silt loam
H3 - 20 to 44 inches: silt loam
H4 - 44 to 56 inches: silty clay loam
H5 - 56 to 72 inches: silty clay

Properties and qualities

Slope: 5 to 8 percent
Depth to restrictive feature: 16 to 24 inches to fragipan
Drainage class: Moderately well drained
Runoff class: Very high
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 12 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C/D

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

Minor Components

Unnamed hydric soils (134dr)
Percent of map unit: 2 percent
Landform: Drainageways
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Soil Information for All Uses

Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

Land Classifications

Land Classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

Hydric Rating by Map Unit (Woodscape Phase 6)

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Map—Hydric Rating by Map Unit (Woodscape Phase 6)

Map Scale: 1:2,670 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 35 70 140 210

Feet
0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Lines
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Points
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

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 19, Sep 6, 2024

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.

Table—Hydric Rating by Map Unit (Woodscape Phase 6)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Ar	Ariel silt loam	10	6.9	33.0%
BrB2	Byram silt loam, 2 to 5 percent slopes, eroded	0	8.0	38.1%
BrC2	Byram silt loam, 5 to 8 percent slopes, eroded	2	6.0	28.8%
Totals for Area of Interest			**20.9**	**100.0%**

Rating Options—Hydric Rating by Map Unit (Woodscape Phase 6)

Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

Water Features

This folder contains tabular reports that present soil hydrology information. The reports (tables) include all selected map units and components for each map unit. Water Features include ponding frequency, flooding frequency, and depth to water table.

Hydrologic Soil Group and Surface Runoff (Woodscape Phase 6)

This table gives estimates of various soil water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

Surface runoff refers to the loss of water from an area by flow over the land surface. Surface runoff classes are based on slope, climate, and vegetative cover. The concept indicates relative runoff for very specific conditions. It is assumed that the surface of the soil is bare and that the retention of surface water resulting from irregularities in the ground surface is minimal. The classes are negligible, very low, low, medium, high, and very high.

Report—Hydrologic Soil Group and Surface Runoff (Woodscape Phase 6)

Absence of an entry indicates that the data were not estimated. The dash indicates no documented presence.

Hydrologic Soil Group and Surface Runoff–Madison County, Mississippi			
Map symbol and soil name	**Pct. of map unit**	**Surface Runoff**	**Hydrologic Soil Group**
Ar—Ariel silt loam			
Ariel	90	Low	C
BrB2—Byram silt loam, 2 to 5 percent slopes, eroded			
Byram	90	Very high	C/D
BrC2—Byram silt loam, 5 to 8 percent slopes, eroded			
Byram	90	Very high	C/D

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

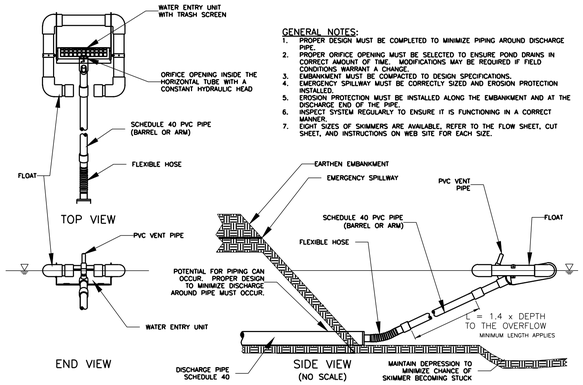
United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

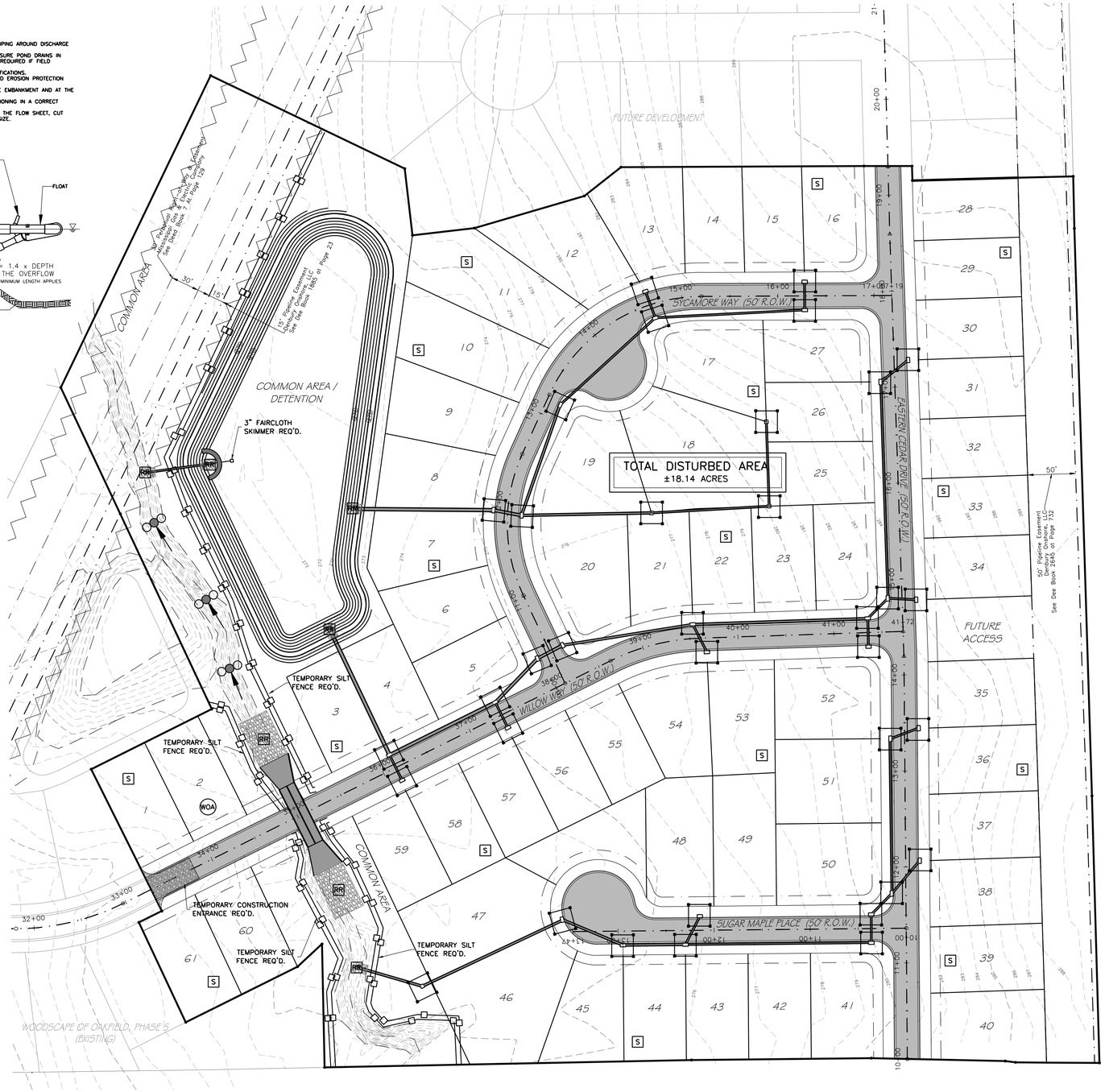
XI. APPENDIX III –STORM WATER MANAGEMENT PLANS/ RESIDENTIAL LOT COVERAGE FORM

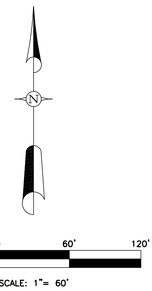


GENERAL NOTES:

1. PROPER DESIGN MUST BE COMPLETED TO MINIMIZE PIPING AROUND DISCHARGE PIPE.
2. PROPER ORIFICE OPENING MUST BE SELECTED TO ENSURE POND DRAINS IN CORRECT AMOUNT OF TIME. MODIFICATIONS MAY BE REQUIRED IF FIELD CONDITIONS WARRANT A CHANGE.
3. EMBANKMENT MUST BE COMPACTED TO DESIGN SPECIFICATIONS.
4. EMERGENCY SPILLWAY MUST BE CORRECTLY SIZED AND EROSION PROTECTION INSTALLED.
5. EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT AND AT THE DISCHARGE END OF THE PIPE.
6. INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.
7. EIGHT SIZES OF SKIMMERS ARE AVAILABLE, REFER TO THE FLOW SHEET, CUT SHEET, AND INSTRUCTIONS ON WEB SITE FOR EACH SIZE.

FAIRCLOTH SKIMMER DETAIL
N.T.S.





SEDIMENT BASIN CALCULATIONS

TOTAL DRAINAGE AREA: 10.43 ACRES

REQUIRED BASIN VOLUME: 10.43 ACRES x 3,600 C.F. / 1 ACRE = 37,548 C.F.

PROVIDED BASIN VOLUME: 305,324 C.F.

3" SKIMMER DISCHARGE RATE (PER EACH): 10,588 C.F. PER DAY

DEWATERING TIME: 37,548 C.F. / (10,588 C.F.) = 3.55 DAYS

PERMANENT EROSION CONTROL PRACTICES

RR	RIPRAP
S	TEMPORARY AND PERMANENT SEEDING
WSF	WATTLE AND SILT FENCE
WOA	WASH-OUT AREA/LAYDOWN/STORAGE AREA/MAINTENANCE & REPAIR AREA

TEMPORARY EROSION CONTROL PRACTICES

	STORM DRAIN INLET PROTECTION (SILT FENCE, WATTLE)
	SILT FENCE
	EROSION CHECK (WATTLE)
	STONE FILTER RING
	ROCK CHECK DAM

NOTES:

1. CONTRACTOR SHALL KEEP ALL EXISTING STREETS FREE AND CLEAN OF DEBRIS AND SEDIMENT DURING CONSTRUCTION.
2. ALL CURB AND AREA INLETS SHALL BE PROTECTED BY SILT FENCE AND WATTLES FOLLOWING INSTALLATION. CONTRACTOR SHALL MAINTAIN INLET PROTECTION UNTIL FINAL STABILIZATION.
3. FOLLOW PLANNING AND DESIGN MANUAL (DEQ) FOR STORMWATER MANAGEMENT.

Revisions

#	Date	Nature	By	App'd.

Project No. M-2403-8	Designed By R.C.M.
Date 9/13/2024	Drawn By B.R.J.
Scale SEE ABOVE	Checked By R.C.M.

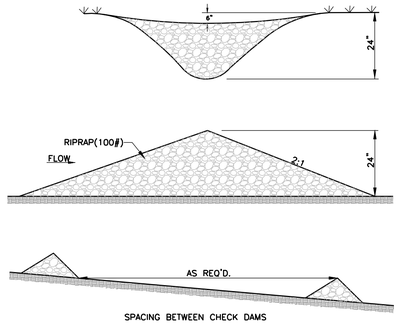
WOODSCAPE OF OAKFIELD, PHASE 6

MADISON COUNTY, MISSISSIPPI

McMASTER & ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
212 WATERFORD SQUARE
SUITE 300
MADISON, MS 39110
601.605.1090

EROSION CONTROL PLAN

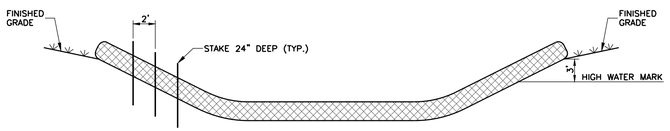
7



CHECK DAM DETAILS
N.T.S.

NOTES:

1. CHECK DAM SHALL BE NO MORE THAN 2 FEET IN HEIGHT
2. THE CENTER OF THE CHECK DAM SHALL BE AT LEAST 6 INCHES LOWER THAN THE OUTER EDGES.
3. COVER THE SWALE WITH THE CHECK DAM AND SET THE HEIGHT FO THE OUTER EDGES SO THAT RUNOFF WILL NOT FLOW AROUND EITHER END.
4. SPACE THE CHECK DAMS SO THAT THE CENTER OF EACH CHECK DAM IS THE SAME ELEVATION AS THE BOTTOM OF THE CHECK DAM IMMEDIATELY ABOVE IT.
5. USE 100# RIPRAP PLACED ON FILTER FABRIC.
6. CHECK FOR SEDIMENT ACCUMULATION AFTER EACH SIGNIFICANT RAINFALL. REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES 1/2 OF THE DAM'S ORIGINAL HEIGHT.
7. CHECK FOR EROSION AROUND EDGES OF DAM AND EXTEND DAM IF EROSION IS TAKING PLACE.
8. REMOVE DAM WHEN SURROUNDING AREA HAS BEEN STABILIZED. IMMEDIATELY STABILIZE AREA UNDER DAM.



WATTLE INSTALLATION CRITERIA:

MAY BE INSTALLED FLAT ON THE GROUND OR ENTRENCHED.

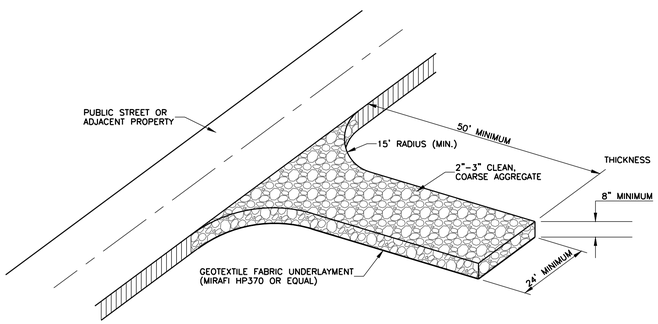
MAY BE INSTALLED OVER BARE SOIL OR OVER EROSION CONTROL BLANKETS AND ON STEEP SLOPES.

SHOULD REMAIN IN PLACE UNTIL VEGETATION IS FULLY ESTABLISHED AND CAN SURVIVE ON ITS OWN.

TYPICALLY SECURED TO THE SUBGRADE SOIL USING A 1-INCH BY 1-INCH WOOD STAKE. STAKES SHOULD BE PLACED EVERY TWO FEET ACROSS THE LENGTH OF THE SEDIMENT TUBE. STAKES SHOULD BE INTERTWINED WITH OUTER MESH ON THE DOWNSTREAM SIDE AND DRIVEN INTO THE GROUND A MINIMUM OF 24 INCHES.

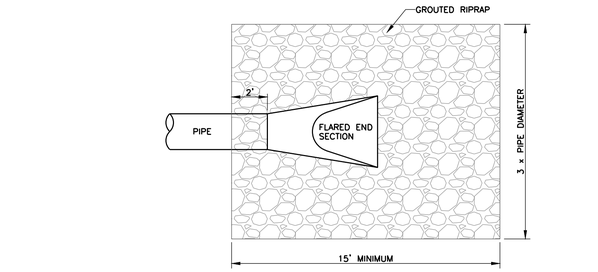
WATTLES PLACED IN SWALES OR CHANNEL BOTTOMS SHOULD CONTINUE UP THE SIDE SLOPES THREE FEET ABOVE THE ANTICIPATED HIGH WATER MARK AND PERPENDICULAR TO THE FLOW OF WATER.

WATTLE INSTALLATION DETAIL
N.T.S.

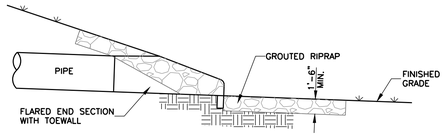


ISOMETRIC VIEW

CONSTRUCTION ENTRANCE DETAIL
N.T.S.

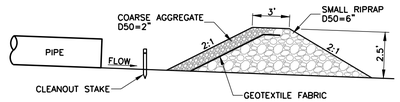


PLAN VIEW



SECTION

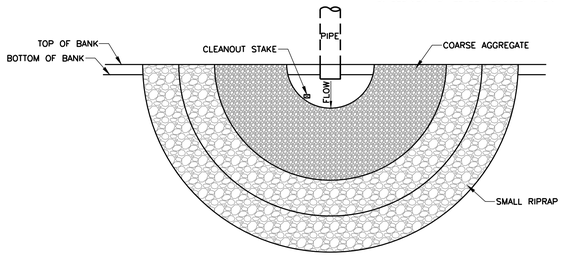
FLARED END SECTION WITH RIPRAP DETAILS
N.T.S.



CROSS SECTION VIEW

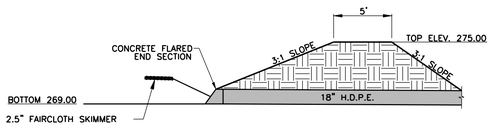
NOTES:

1. AGGREGATE AND RIPRAP SHALL BE WASHED WITH LITTLE TO NO FINES.
2. PROVIDE CLEANOUT STAKE.
3. SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF FULL.

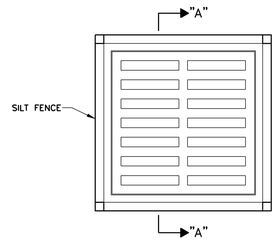


OUTLET (PLAN VIEW)

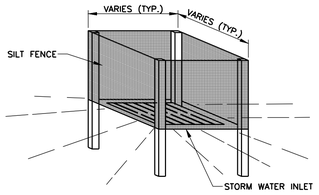
TEMPORARY STONE FILTER RING DETAILS
N.T.S.



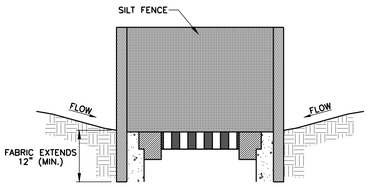
DETENTION BASIN OUTLET DETAIL
N.T.S.



PLAN VIEW

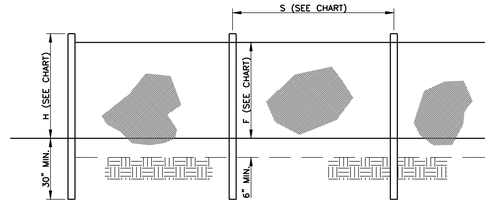


ISOMETRIC VIEW

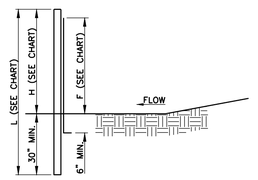


SECTION "A-A"

SILT FENCE INLET PROTECTION DETAILS
N.T.S.



ELEVATION



SECTION

POST SIZE, MATERIAL AND SPACING CHART		
	WITHOUT BACKING	WITH BACKING
MIN. LENGTH = L	58"	58"
MIN. HEIGHT = H	2'-0"	2'-6"
MAX. SPACING = S	6'-0"	6'-0"
MIN FABRIC WIDTH	28"	28"
MATERIAL	1.25 LB/FT. STEEL	1.25 LB/FT. STEEL
	WITHOUT BACKING	WITH BACKING
TENSILE STRENGTH (LBS. MIN.)(1) (ASTM D-4632)	WARP - 120 FILL - 100	WARP - 310 FILL - 200
ELONGATION (% MAX.) (ASTM D-4632)	20	------
AOS (APPARENT OPENING SIZE) (MAX. SIEVE SIZE) (ASTM D-4751)	#30	#70
FLOW RATE (GAL./MIN./SQ.FT) (CRT-85) (MAX.)	4	18
ULTRAVIOLET STABILITY (2) (ASTM D-4632 AFTER 300 HOURS WEATHERING IN ACCORDANCE WITH ASTM D-4355)	70	90
BURSTING STRENGTH (PSI MIN.) (ASTM D-3786 DIAPHRAM BURSTING STRENGTH TESTER)	250	400
MIN. FABRIC WIDTH (INCHES) = H+	36	36
(1) MINIMUM ROLL AVERAGE OF FIVE SPECIMENS (2) PERCENT OF REQUIRED INITIAL MINIMUM STRENGTH		

NOTES:

1. USE SILT FENCE WITHOUT BACKING UNLESS OTHERWISE NOTED.
2. SILT FENCE SHALL BE INSTALLED USING A MECHANICAL TRENCHING MACHINE.
3. FABRIC, IN AREAS WHERE ROCK PROHIBITS PROPER EMBEDMENT, SHALL BE SECURED BY PLACING CLEAN CRUSHED STONE OR SAND ALONG THE BASE OF THE FENCE, 20 POUNDS OF STONE OR SAND PER FOOT, MINIMUM.
4. FILTER FABRIC SHALL BE FASTENED TO POSTS WITH A MINIMUM OF FIVE WIRES OR PLASTIC ZIP TIES WITH A MINIMUM OF 50 LBS. TENSILE STRENGTH.
5. CONTRACTOR SHALL PERIODICALLY REMOVE ACCUMULATED SEDIMENT WHEN SEDIMENT DEPTH REACHES 12".

SILT FENCE INSTALLATION DETAILS
N.T.S.

Revisions

#	Date	Nature	By	App'd.

Project No. M-2403-8	Designed By R.C.M.
Date 9/13/2024	Drawn By B.R.J.
Scale SEE ABOVE	Checked By R.C.M.

WOODSCAPE OF OAKFIELD, PHASE 6
MADISON COUNTY, MISSISSIPPI

McMASTER & ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
212 WATERFORD SQUARE
SUITE 300
MADISON, MS 39110
601.605.1090

EROSION CONTROL DETAILS

8

Keep a Copy at the Construction Site and Also Submit this Page to:
Chief, Environmental Permits Division
MS Department of Environmental Quality, Office of Pollution Control
P.O. Box 2261
Jackson, Mississippi 39225-2261

Registration Form for Residential Lot Coverage
under Mississippi's Large Construction Storm Water General Permit
INSTRUCTIONS

Coverage recipients for residential subdivision construction that do not retain responsibility for permit compliance for individual lots are to furnish this Registration to buyers of individual lots at the time of purchase. In addition, the attached Requirements for Individual Lots in Residential Subdivisions, the Site Inspection and Certification Form and the Large Construction Storm Water General Permit shall also be given to buyers of individual lots at the time of purchase. This form is providing notification to buyers of lots in residential developments, that being part of a "larger common plan of development or sale," coverage is required under Mississippi's Large Construction Storm Water General Permit. To comply with the permit, **the Registration Form must be submitted to MDEQ** at the address listed above and a Storm Water Pollution Prevention Plan (SWPPP) must be developed and implemented to reduce pollutants in storm water discharges during construction activity. **The SWPPP is not required to be submitted to MDEQ**. A copy of the SWPPP and Registration Form must be kept at the construction site or locally available (i.e., able to be produced within an hour of being requested by a state or local inspector). See the following attachments for information on SWPPP development. In addition, **a copy of the completed Registration Form(s) must be retained by the developer and submitted to the MDEQ when requesting termination of permit coverage**. If the buyer or homebuilder sells the lot before a house is built, they must provide this form to the new owner. All questions must be answered. Answer "NA" if the question is not applicable. For further information, contact MDEQ at 601/961-5171 or access our website address: www.deq.state.ms.us/MDEQ.nsf/page/epd epdgeneral.

ORGINAL COVERAGE RECIPIENT NAME:

_____

COMPANY NAME:

_____

STREET OR P.O. BOX:

_____

CITY: **STATE:** **ZIP:**

_____

PHONE # (INCLUDE AREA CODE):

_____

BUYER / HOMEBUILDER:

_____

COMPANY NAME (IF APPROPRIATE):

_____

STREET OR P.O. BOX:

_____

CITY: **STATE:** **ZIP:**

_____

BUYER PHONE # (INCLUDE AREA CODE):

_____

RESIDENTIAL SUBDIVISON NAME: _____

LARGE CONSTRUCTION STORM WATER PERMIT COVERAGE NUMBER: MSR10: ___ ___ ___ ___

LOT NUMBER(s) (attach an additional sheet if necessary): _____ **LOT SIZE(s):** _____

PHYSICAL SITE ADDRESS (IF NOT AVAILABLE INDICATE THE NEAREST NAMED ROAD):

STREET: _____

CITY: _____ **COUNTY:** _____ **ZIP:** _____

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 persons 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. As a buyer / homebuilder, I further certify that I have read and understand the terms and conditions of Mississippi's Large Construction Storm Water General Permit and that I am responsible for installing and maintaining the appropriate pollution control measures for the purchased lot(s) identified.

_____ _____
Original Coverage Recipient Signature[1] **Date Signed**

_____ _____
Printed Name **Title**

_____ _____
Buyer / Homebuilder Signature[1] **Date Signed**

_____ _____
Printed Name **Title**

[1]**This application shall be signed according to ACT12, T-7 of the Large Construction General Permit.**

Revised: 12/30/10

REQUIREMENTS FOR LOTS IN RESIDENTIAL SUBDIVISION WHICH ARE COVERED BY THE LARGE CONSTRUCTION STORM WATER GENERAL PERMIT

As a homebuilder on a lot that is part of a regulated subdivision, you are also regulated under the State's storm water regulations and are required to take steps to keep soil and sediment from leaving the lot. When rain falls on exposed soil it can wash away valuable topsoil. It also carries sediment, nutrients and other pollutants into streets, gutters and ditches, where it then travels to lakes, rivers, streams or wetlands. Polluted runoff can cause excessive growth of aquatic weeds and algae and reduce recreational opportunities such as swimming and fishing. Sediment laden runoff can also destroy fish habitat reducing productive fishing opportunities. In addition, sediment-laden runoff can also clog pipes, ditches, streams and basins resulting in increased flooding and maintenance cost. Therefore, the homebuilder is required to minimize off-site damage from soil erosion, sediment leaving the construction site, and poor "housekeeping" practices. This requirement must be accomplished by developing and implementing a Storm Water Pollution Prevention Plan (SWPPP). Some examples of individual lot SWPPPs are attached for your convenience. Sketch the controls on a copy of your site plan. Narrative notes on the site plan may also be used in addition to the erosion control symbols.

In developing and implementing the SWPPP, controls must be used from each control group (vegetative, structural, housekeeping) to prevent erosion and sediment and other pollutants from leaving the site. Commonly used controls include:

Vegetative Controls

Temporary vegetation includes annual grasses that sprout quickly such as annual rye, browntop millet, oats, and winter wheat. These grow quickly with little care and can protect the soil from rainfall and act as a filter. They will not provide permanent cover. Permanent cover must be established as indicated below. When a disturbed area will be left undisturbed for fourteen (14) days or more, the appropriate temporary or permanent vegetative practices shall be implemented within seven (7) calendar days.

Mulching is the placement of hay grass, woodchips, straw, or synthetic material on the soil to provide temporary cover to protect the soil from rain. Mulching may be the only option during the winter when seeding or sodding is not possible. Mulch must stay in place to be effective. Netting, stakes or chemical binders are used to anchor some types of mulch. Be sure to reinstall washed-out mulch and anchor if necessary until permanent cover is established.

Permanent stabilization is the establishment of a permanent vegetative cover on disturbed areas using either sod, perennial seed, trees or shrubs. When a disturbed area will be left undisturbed for fourteen (14) days or more, the appropriate temporary or permanent vegetative practices shall be implemented within seven (7) calendar days. Silt fences, and other temporary measures must be removed following permanent stabilization.

Vegetative buffer zones are undisturbed or planted vegetated areas that are between construction activities and water bodies.

Structural Controls

Silt fences are temporary sediment barriers made of filter fabric buried at the bottom, stretched, and supported by stakes. The silt fence slows runoff and allows it to puddle or pond, so soil and sediment can settle out before leaving the site. The bottom eight to twelve inches of fence must either be sliced in or buried in a trench about four to six inches deep by four to six inches wide. **Silt fences that are not buried are improperly installed. They have no useful function, are a waste of money, and may result in enforcement action**. Stakes must be on the downstream side of the fence and spaced about 3 feet apart. Silt fence must not be installed across streams, ditches, waterways, or other concentrated flow areas. Place fences on the contour or perpendicular to the slope of the hill so that water and sediment will pond behind the fence. **Turn ends uphill** to prevent water going around the end. Install on the downslope, downhill, downstream, or low side of your lot. Keep the fence/barrier in place until grass is established.

Slope drains are piping or lined channels that carry storm water downslope without erosion. A good example would be a downspout extender. Extenders may be used to protect temporarily stabilized areas from roof runoff. Extenders can direct water from roof gutters to paved or grassed areas. Remove extenders following permanent stabilization.

Construction entrance/exits are stone stabilized site entrances which reduce sediment tracked onto public roads. Apply gravel or crushed rock to the driveway area and restrict traffic to this one route. Use 3 to 6 inch gravel over a geotextile fabric. At the end of each day sweep or scrape up any soil tracked onto the street. Limit "standard" vehicle access (including workers' vehicles) to only streets and roads, keep vehicles off of future yard areas; limit tracking of mud onto streets by requiring any required vehicles to use designated access drives. Streets are conduits for storm water, it is important to keep mud and sediment off the streets.

Stockpiles of sand or soil should be covered with plastic or tarps at the end of each workday, or surrounded with silt fence or haybales. Do not locate a stockpile near a street, storm drain inlet, or ditch.

Erosion control blankets or mats are machine-produced mats of straw or other fibers held together with netting that provide temporary or permanent stabilization in critical areas, such as slopes or channels, so that vegetation may be established.

Storm Drain Inlets on the lot must be protected by surrounding or covering with a filter material until final stabilization has been achieved.

Additional Controls: The above controls are the more common practices used at small construction sites. There are a number of other controls, techniques and manufactured product available. A few examples include hydro seeding, diversion berms, silt dikes and fiber logs. Even something as simple as a tarp or plastic may provide temporary cover for small exposed areas. You may wish to contact an erosion and sediment control specialist, local building official, or MDEQ for further information. In addition, MDEQ has several guidance manuals that may be of assistance and the internet has abundant guidance on construction BMPs.

Housekeeping Controls: Pollutants that may enter storm water from construction sites because of poor housekeeping include oils, grease, paints, gasoline, solvents, litter, debris, and sanitary waste. Good housekeeping practices include:

- Frequent cleaning of trash and debris, providing waste receptacles at convenient locations and providing regular collection of waste;
- Directing concrete trucks to the subdivision's designated wash-off area(s) or back to the Ready-Mix facility;
- Providing protected storage areas for chemicals, paints, solvents, fertilizers, and other potentially toxic materials; and
- Providing adequately maintained sanitary facilities.

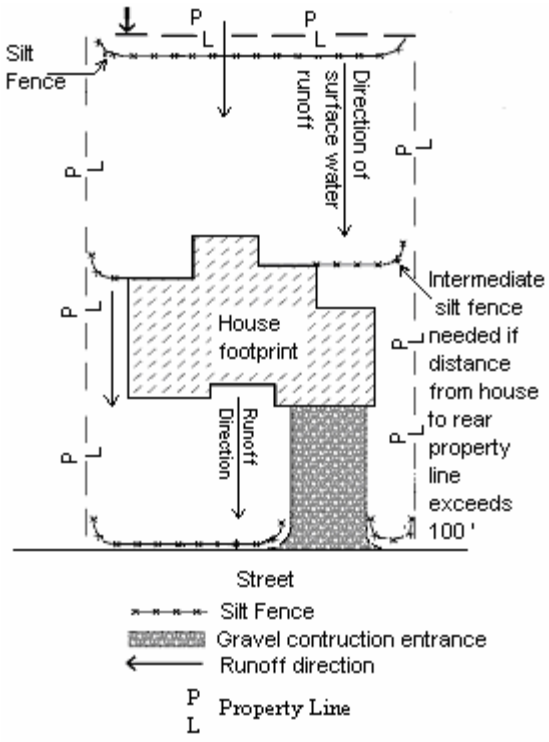
In addition, you should be aware that State air regulations prohibit the open burning of residential solid waste.

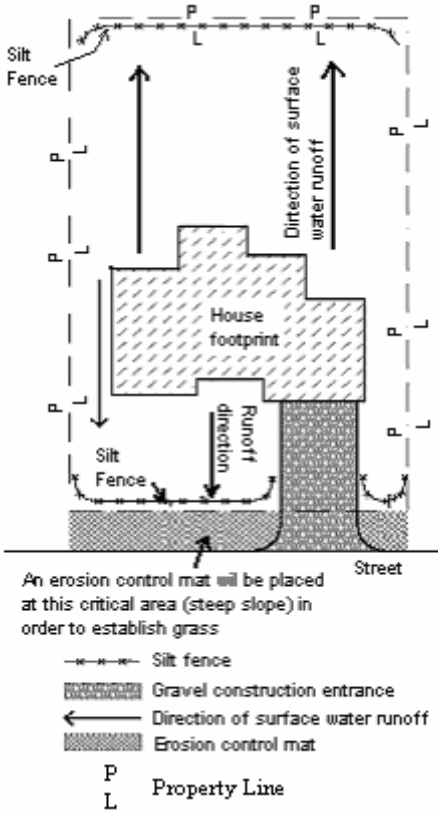
Inspection Requirements. Homebuilders shall inspect all erosion controls as often as is necessary, but no less than weekly, to ensure that appropriate erosion and sediment controls have been properly constructed and maintained to prevent erosion and sediment from leaving the site and determine if additional or alternative control measures are required. The inspection results shall be recorded on the Site Inspection and Certification Form contained in the Large Construction Forms Package. MDEQ strongly recommends that homebuilders perform a "walk through" inspection of the controls before anticipated storm events. It is a responsibility of the homebuilder to install additional and/or alternative erosion and sediment controls when existing controls prove to be ineffective in preventing sediment from leaving the site.

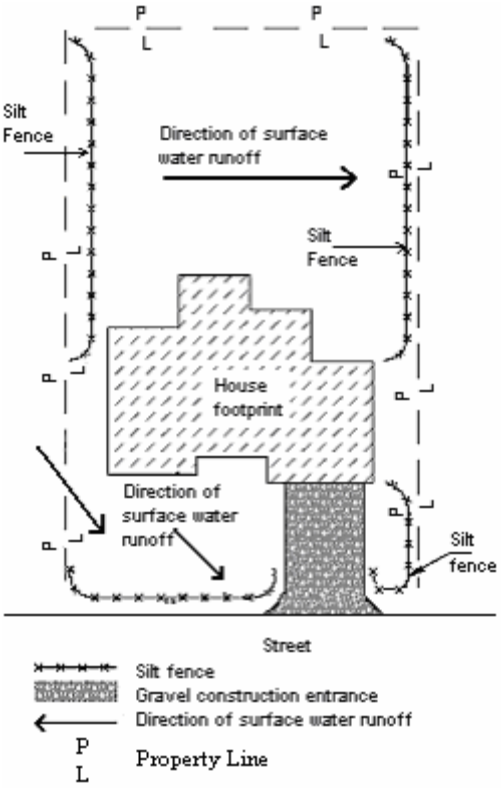
Retention of Records. All records, reports, forms and information resulting from activities required by this permit shall be retained for a period of at least three years from the date of the document origin.

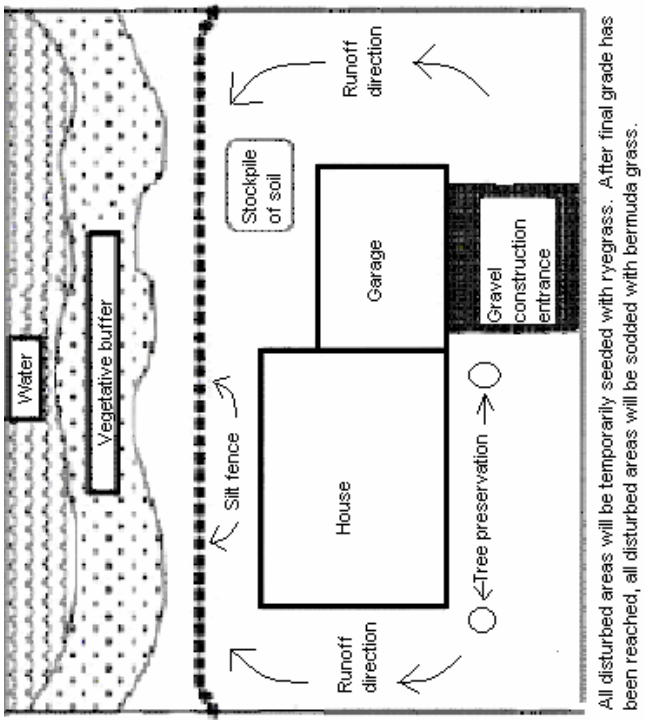
Duty to Comply. Lot owners must comply with the applicable permit conditions. See Activities 3, 5, 6, 7, 10 and 11 in the Large Construction Storm Water General Permit for applicable conditions. Any noncompliance with the applicable permit conditions and aforementioned conditions including sediment leaving the lot constitutes a violation of the Mississippi Water Pollution Control Law and is grounds for enforcement action. It shall not be an acceptable defense that controls were not installed because subsequent activities would require their replacement or cause their destruction.

EXAMPLE INDIVIDUAL LOT EROSION AND SEDIMENT CONTROL PLANS









XII. APPENDIX IV – SEEDING CHART FOR STATE OF MS

SEEDING CHART FOR THE STATE OF MISSISSIPPI

***For a more comprehensive vegetation schedule, see "Erosion Control, Sediment Control and Stormwater Management on Construction Sites and Urban Areas (Three Volumes)"**

SPECIES	SEEDING RATE/ ACRE	PLANTING TIME	DESIRED pH RANGE	FERTILIZATION RATE/ACRE	METHOD OF ESTABLISH-MENT	ZONE OF ADAPT-ABILITY	NATIVE/ INTRODUCED
Common Bermuda	15 lbs. alone 10 lbs. mix-ture	3/1 - 7/15 9/1 - 11/30	6.0 - 7.0	600 lbs. 13-13-13	seed or sod	All	Introduced *Potential for Invasiveness
Bahia	40 lbs. alone 30 lbs. mixture	3/1 - 7/15 9/1 - 11/30	6.0 - 7.0	600 lbs. 13-13-13	seed	Central & South	Introduced
Fescue	40 lbs. alone 30 lbs. mix-ture	9/1- 11/30	6.0 - 7.0	600 lbs. 13-13-13	seed	North & Central	Native
Saint Augustine	--	3/1 - 7/15	6.0 - 7.0	600 lbs. 13-13-13	sod only	Central & South	Native
Centipede	4 lbs. alone 2.5 lbs. mix	3/1 - 7/15	6.0 - 7.0	600 lbs. 13-13-13	seed or sod	All	Introduced
Carpet Grass	15 lbs. alone 10 lbs. mix-ture	3/1 - 7/15	6.0 - 7.0	600 lbs. 13-13-13	seed or sod	All	Native
Zoysia Grass	--	3/1 - 7/15	6.0 - 7.0	600 lbs. 13-13-13	sod only	All	Introduced
Creeping Red Fescue	30 lbs. alone 22.5 lbs. mix	9/1 - 11/30	6.0 - 7.0	600 lbs. 13-13-13	seed	All	Native
Weeping Lovegrass	10 lbs. alone 5 lbs. mix	3/1 - 7/15	6.0 - 7.0	600 lbs. 13-13-13	seed	All	Introduced
Sericea Lespedeza	40 lbs.	3/1 - 7/15 9/1 - 11/30	6.0 - 7.0	400 lbs. 6-24-24	seed	All	Introduced
***Wheat**	90 lbs. alone	9/1 - 11/30	6.0 - 7.0	600 lbs. 13-13-13	seed	All	Native
***Ryegrass**	30 lbs.	9/1 - 11/30	6.0 - 7.0	600 lbs. 13-13-13	seed	All	Native
***White Clover**	5 lbs.	9/1 - 11/30	6.0 - 7.0	400 lbs. 6-24-24	seed	All	Introduced
***Crimson Clover**	15 lbs.	9/1 - 11/30	6.0 - 7.0	400 lbs. 6-24-24	seed	All	Introduced
***Hairy Vetch**	30 lbs.	9/1 - 11/30	6.0 - 7.0	400 lbs. 6-24-24	seed	All	Introduced
***Browntop Millet**	40 lbs. alone 15 lbs. mix	4/1 - 8/30	6.0 - 7.0	600 lbs. 13-13-13	seed	All	Introduced

*Note on Annuals. For permanent seeding, annuals can only be used in a mixture with perennials.

North-north of Hwy. 82
Central- south of Hwy. 82 & north of Hwy. 84
South- south of Hwy. 84

XIII. APPENDIX IIV – NATIONWIDE PERMIT

STATE OF MISSISSIPPI
TATE REEVES
GOVERNOR
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
CHRIS WELLS, EXECUTIVE DIRECTOR
December 11, 2020

Ms. Jennifer Mallard
U.S Army Corps of Engineers,
Vicksburg District
4155 Clay Street
Vicksburg, Mississippi 39183-3435

Re: US Army COE,
Nationwide Permit No. 29
WQC No. WQC20200056

Pursuant to Section 401 of the Federal Water Pollution Control Act (33 U. S. C. 1251, 1341), the Office of Pollution Control (OPC) issues this Certification, after public notice and opportunity for public hearing, to the U.S. Army Corps of Engineers, an applicant for a Federal License or permit to conduct the following activity:

US Army COE, Nationwide Permit No. 29:

Nationwide Permits (NWPs) are general permits issued on a nationwide basis to streamline the authorization of activities that have no more than minimal and cumulative adverse effects on the aquatic environment. The U.S. Army Corps of Engineers issues NWPs to authorize certain activities that require Department of the Army permits under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899.

29. *Residential Developments*. Discharges of dredged or fill material into non-tidal waters of the United States for the construction or expansion of a single residence, a multiple unit residential development, or a residential, subdivision. This NWP authorizes the construction of building foundations and building pads and attendant features that are necessary for the use of the residence or residential development. Attendant features may include but are not limited to roads, parking lots, garages, yards, utility lines, storm water management facilities, septic fields, and recreation facilities such as playgrounds, playing fields, and golf courses (provided the golf course is an integral part of the residential development).

The discharge must not cause the loss of greater than 1⁄2-acre of non-tidal waters of the United States. This NWP does not authorize discharges into nontidal wetlands adjacent to tidal waters.

Subdivisions: For residential subdivisions, the aggregate total loss of waters of United States authorized by this NWP cannot exceed 1/2-acre. This includes any loss of waters of the United States associated with development of individual subdivision lots.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 32.) (Authorities: Sections 10 and 404) [NWP No. 29, WQC2020056].

The Office of Pollution Control certifies that the above-described activity will be in compliance with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the Federal Water Pollution Control Act and Section 49-17-29 of the Mississippi Code of 1972, if the applicant complies with the following conditions:

1. Impacts in excess of 300 linear feet to perennial and/or intermittent streams shall not be authorized by this certification. Perennial streams will generally be indicated by a solid blue line on the latest version of the United States Department of the Interior, Geological Survey Quadrangle Map (Scale 1:24,000, 7.5 minute series). Intermittent streams will generally be indicated by a broken blue line on the latest version of the United States Department of the Interior, Geological Survey Quadrangle Map (Scale 1:24,000, 7.5 minute series). (Statement D) (11 Miss. Admin. Code Pt. 6, R. 1.3.4.A(3))

2. For the construction or expansion of golf courses or attendant features, the applicant shall obtain approval or waiver for a Storm Water Quality Management Plan from Mississippi Department of Environmental Quality (the Department) prior to construction. (Statement B) (11 Miss. Admin. Code Pt. 6, R. 1.3.4.A(9))

3. In cases where a pre-construction notification (PCN) is required, a PCN shall be provided to the Department for projects that include channel work within waterways found on the latest version of the State of Mississippi's Section 303(d) List of Impaired Water Bodies for sediment or biological impairment or waterways with a completed Total Maximum Daily Load (TMDL) for sediment or biological impairment. This notification shall include the following:

    a. Justification of why the impacts cannot be avoided;

    b. Proposed best management practices that would minimized the impacts to receiving sensitive waters; and

    c. Compensatory mitigation primarily along the same reach of stream or on another impaired stream within the same drainage basin. (Statement A, D, & E) (11 Miss. Admin. Code Pt. 6, R. 1.3.4.A(3))

4. This certification shall not allow discharges of dredged or fill materials associated with the construction of developments in certain existing subdivisions on the Mississippi Gulf Coast originally platted in lands which, because of the passage of the Federal Act and related laws and/or regulations, are presently unsuitable for development, as described in Exhibit E of 11 Mississippi Administrative Code Part 6, Chapter 1, Subchapter 3 (coastal subdivisions platted prior to the Clean Water Act with waterfront access to estuarine waters by man-made canals). (Statement A, D, & E) (11 Miss. Admin. Code Pt. 6, R. 1.3.4.C.(5))

5. The permittee shall obtain appropriate wastewater permits and/or approvals for the proposed activity prior to the commencement of construction activities. (Statement C) (11 Miss. Admin. Code Pt. 6, R. 1.1.1.B)

6. For projects greater than five acres of total ground disturbances including clearing, grading, excavating, or other construction activities, the applicant shall obtain the necessary coverage under the State of Mississippi's Large Construction Storm Water General NPDES Permit. For projects greater than one, to less the five acres of total ground disturbances including clearing, grading, excavating, or other construction activities, the applicant shall follow the conditions and limitations of the State of Mississippi's Small Construction Storm Water General NPDES Permit. No construction activities shall begin until the necessary approvals and/or permits have been obtained. (Statement B & C) (11 Miss. Admin. Code Pt. 6, R. 1.1.1.B.)

7. Turbidity outside the limits of a 750-foot mixing zone shall not exceed the ambient turbidity by more than 50 Nephelometric Turbidity Units. (Statement A) (11 Miss. Admin. Code Pt. 6, R. 2.2.A.)

8. No sewage, oil, refuse, or other pollutants shall be discharged into the watercourse. (Statement A) (11 Miss. Admin. Code Pt. 6, R. 2.2.A.(3))

As part of the Scope of Review for Application Decisions, 11 Mississippi Administrative Code Part 6, Rule 1.3.4(B), the above conditions are necessary for the Department to ensure that appropriate measures will be taken to eliminate unreasonable degradation and irreparable harm to waters of the State, such that the activity will not meet the criteria for denial:

(A) The proposed activity permanently alters the aquatic ecosystem such that water quality criteria are violated and/or it no longer supports its existing or classified uses. An example is the channelization of streams

(B) Nonpoint source/storm water management practices necessary to protect water quality have not been proposed.

(C) Denial of wastewater permits and/or approvals by the State with regard to the proposed activities.

(D) The proposed activity in conjunction with other activities may result in adverse cumulative impacts.

(E) The proposed activity results in significant environmental impacts which may adversely impact water quality.

The Office of Pollution Control also certifies that there are no limitations under Section 302 nor standards under Sections 306 and 307 of the Federal Water Pollution Control Act which are applicable to the applicant's above-described activity.

This certification is valid for the project as proposed. Any deviations without proper modifications and/or approvals may result in a violation of the 401 Water Quality Certification. If you have any questions, please contact the Department.

Sincerely,

Krystal Rudolph

Krystal Rudolph, P.E., BCEE
Chief, Environmental Permits Division

KR: ld

cc: U.S. Army Corps of Engineers, Mobile District
U.S. Army Corps of Engineers, Memphis District
U.S. Army Corps of Engineers, Nashville District
U.S. Army Corps of Engineers, New Orleans District
Department of Marine Resources
U.S. Fish and Wildlife Service
U.S Environmental Protection Agency, Region 4