



MISSISSIPPI DEPARTMENT OF  
ENVIRONMENTAL QUALITY

## **LARGE CONSTRUCTION NOTICE OF INTENT (LCNOI) FOR COVERAGE UNDER THE LARGE CONSTRUCTION STORM WATER GENERAL NPDES PERMIT**

### **INSTRUCTIONS**

The Large Construction Notice of Intent (LCNOI) is for coverage under the Large Construction General Permit for land disturbing activities of five (5) acres or greater; or for land disturbing activities, which are part of a larger common plan of development or sale that are initially less than five (5) acres but will ultimately disturb five (5) or more acres. Applicant must be the owner or operator. For construction activities, the operator is typically the prime contractor. The owner(s) of the property and the prime contractor associated with regulated construction activity on the property have joint and severable responsibility for compliance with the Large Construction Storm Water General Permit MSR10.

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

Completed LCNOIs should be filed at least thirty (30) days prior to the commencement of construction. Discharge of storm water from large construction activities without written notification of coverage is a violation of state law.

Submittals with this LCNOI must include:

- A site-specific Storm Water Pollution Prevention Plan (SWPPP) developed in accordance with ACT5 of the General Permit
- A detailed site-specific scaled drawing showing the property layout and the features outlined in ACT5 of the General Permit
- A United States Geological Survey (USGS) quadrangle map or photocopy, extending at least one-half mile beyond the facility property boundaries with the site location and outfalls outlined or highlighted. The name of the quadrangle map must be shown on all copies. Quadrangle maps can be obtained from the MDEQ, Office of Geology at 601-961-5523.

Additional submittals may include the following, if applicable:

- Appropriate Section 404 documentation from U.S. Army Corps of Engineers
- Appropriate documentation concerning future disposal of sanitary sewage and sewage collection system construction
- Appropriate documentation from the MDEQ Office of Land & Water concerning dam construction and low flow requirements
- Approval from County Utility Authority in Hancock, Harrison, Jackson, Pearl River and Stone Counties

**ALL QUESTIONS MUST BE ANSWERED (Answer "NA" if the question is not applicable)**

**MSR10** \_ \_ \_ \_

(NUMBER TO BE ASSIGNED BY STATE)

**APPLICANT IS THE:** ☐ **OWNER** ☐ **PRIME CONTRACTOR**

**OWNER CONTACT INFORMATION**

**OWNER CONTACT PERSON:** \_\_\_\_\_

**OWNER COMPANY LEGAL NAME:** \_\_\_\_\_

**OWNER STREET OR P.O. BOX:** \_\_\_\_\_

**OWNER CITY:** \_\_\_\_\_ **STATE:** \_\_\_\_\_ **ZIP:** \_\_\_\_\_

**OWNER PHONE #:** (\_\_\_\_) \_\_\_\_\_ **OWNER EMAIL:** \_\_\_\_\_

**PRIME CONTRACTOR CONTACT INFORMATION**

**PRIME CONTRACTOR CONTACT PERSON:** \_\_\_\_\_

**PRIME CONTRACTOR COMPANY LEGAL NAME:** \_\_\_\_\_

**PRIME CONTRACTOR STREET OR P.O. BOX:** \_\_\_\_\_

**PRIME CONTRACTOR CITY:** \_\_\_\_\_ **STATE:** \_\_\_\_\_ **ZIP:** \_\_\_\_\_

**PRIME CONTRACTOR PHONE #:** (\_\_\_\_) \_\_\_\_\_ **PRIME CONTRACTOR EMAIL:** \_\_\_\_\_

**FACILITY SITE INFORMATION**

**FACILITY SITE NAME:** \_\_\_\_\_

**FACILITY SITE ADDRESS** (If the physical address is not available, please indicate the nearest named road. For linear projects indicate the beginning of the project and identify all counties the project traverses.)

**STREET:** \_\_\_\_\_

**CITY:** \_\_\_\_\_ **STATE:** \_\_\_\_\_ **COUNTY:** \_\_\_\_\_ **ZIP:** \_\_\_\_\_

**FACILITY SITE TRIBAL LAND ID (N/A If not applicable):** \_\_\_\_\_

**LATITUDE:** \_\_\_\_ degrees \_\_\_\_ minutes \_\_\_\_ seconds **LONGITUDE:** \_\_\_\_ degrees \_\_\_\_ minutes \_\_\_\_ seconds

**LAT & LONG DATA SOURCE** (GPS (Please GPS Project Entrance/Start Point) or Map Interpolation): \_\_\_\_\_

**TOTAL ACREAGE THAT WILL BE DISTURBED <sup>1</sup>:** \_\_\_\_\_

**IS THIS PART OF A LARGER COMMON PLAN OF DEVELOPMENT?** YES ☐ NO ☐

**IF YES, NAME OF LARGER COMMON PLAN OF DEVELOPMENT:** \_\_\_\_\_  
**AND PERMIT COVERAGE NUMBER:** MSR10 \_ \_ \_ \_

**ESTIMATED CONSTRUCTION PROJECT START DATE:** \_\_\_\_\_  
YYYY-MM-DD

**ESTIMATED CONSTRUCTION PROJECT END DATE:** \_\_\_\_\_  
YYYY-MM-DD

**DESCRIPTION OF CONSTRUCTION ACTIVITY:** \_\_\_\_\_

**PROPOSED DESCRIPTION OF PROPERTY USE AFTER CONSTRUCTION HAS BEEN COMPLETED:** \_\_\_\_\_

**SIC Code** \_ \_ \_ \_ **NAICS Code** \_ \_ \_ \_

NEAREST NAMED RECEIVING STREAM: \_\_\_\_\_

IS RECEIVING STREAM ON MISSISSIPPI'S 303(d) LIST OF IMPAIRED WATER BODIES? (The 303(d) list of impaired waters and TMDL stream segments may be found on MDEQ's web site: [http://www.deq.state.ms.us/MDEQ.nsf/page/TWB\\_Total\\_Maximum\\_Daily\\_Load\\_Section](http://www.deq.state.ms.us/MDEQ.nsf/page/TWB_Total_Maximum_Daily_Load_Section)) YES ☐ NO ☐

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

ARE THERE RECREATIONAL STREAMS, PRIVATE/PUBLIC PONDS OR LAKES WITHIN ½ MILE DOWNSTREAM OF PROJECT BOUNDARY THAT MAY BE IMPACTED BY THE CONSTRUCTION ACTIVITY? YES ☐ NO ☐

EXISTING DATA DESCRIBING THE SOIL (for linear projects please describe in SWPPP):

WILL FLOCCULANTS BE USED TO TREAT TURBIDITY IN STORM WATER? YES ☐ NO ☐

IF YES, INDICATE THE TYPE OF FLOCCULANT. ☐ ANIONIC POLYACRYLAMIDE (PAM)  
☐ OTHER \_\_\_\_\_

IF YES, DOES THE SWPPP DESCRIBE THE METHOD OF INTRODUCTION, THE LOCATION OF INTRODUCTION AND THE LOCATION OF WHERE FLOCCULATED MATERIAL WILL SETTLE? YES ☐ NO ☐

<sup>1</sup>Acreage for subdivision development includes areas disturbed by construction of roads, utilities and drainage. Additionally, a housesite of at least 10,000 ft<sup>2</sup> per lot (entire lot, if smaller) shall be included in calculating acreage disturbed.

**DOCUMENTATION OF COMPLIANCE WITH OTHER REGULATIONS/REQUIREMENTS**  
COVERAGE UNDER THIS PERMIT WILL NOT BE GRANTED UNTIL ALL OTHER REQUIRED  
MDEQ PERMITS AND APPROVALS ARE SATISFACTORILY ADDRESSED

IS LCNOI FOR A FACILITY THAT WILL REQUIRE OTHER PERMITS?

YES ☐ NO ☐

IF YES, CHECK ALL THAT APPLY: ☐ AIR ☐ HAZARDOUS WASTE ☐ PRETREATMENT  
☐ WATER STATE OPERATING ☐ INDIVIDUAL NPDES ☐ OTHER: \_\_\_\_\_

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

IF THE PROJECT REQUIRES A CORPS OF ENGINEER SECTION 404 PERMIT, PROVIDE APPROPRIATE DOCUMENTATION THAT:

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

IS A LAKE REQUIRING THE CONSTRUCTION OF A DAM BEING PROPOSED? YES ☐ NO ☐  
(If yes, provide appropriate approval documentation from MDEQ Office of Land and Water, Dam Safety.)

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 can not 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:

\_\_\_\_\_  
\_\_\_\_\_

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.

Robbie Nguyen

Digitally signed by Robbie Nguyen  
DN: C=US, E=rnguyen@northpointkc.com,  
O=NorthPoint Development, CN=Robbie Nguyen  
Date: 2022.02.11 15:05:18-05'00'

Signature of Applicant<sup>1</sup> (owner or prime contractor)

2/11/2022

Date Signed

Robbie Nguyen

Printed Name<sup>1</sup>

Development Manager

Title

<sup>1</sup>This application shall be signed as follows:

- For a corporation, by a responsible corporate officer.
- For a partnership, by a general partner.
- For a sole proprietorship, by the proprietor.

For a municipal, state or other public facility, by principal executive officer, mayor, or ranking elected official

Please submit the LCNOI form to:

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

STORM WATER POLLUTION  
PREVENTION PLAN  
(SWPPP)

LARGE CONSTRUCTION STORM WATER  
GENERAL NPDES PERMIT

for

NorthPoint Development, LLC  
Project Gendreau

Forrest County, Mississippi

February 2022

PREPARED BY:

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



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## 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 NorthPoint Development, LLC, 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 35, Township 4 North, Range 13 West, Forrest County, Mississippi. The subject property is also referenced by Global Positioning System (GPS) N31.265264 – W89.275366. It is an approximate 19-acre parcel that will be disturbed, to some extent, to complete an industrial building and associated parking. Access to the property is granted via JM Tatum Industrial Drive to the north. ([Appendix I](#)).
- B. **Soils:** The site contains Benndale fine sandy loam (BeC) 5 to 8 percent slopes, Prentiss loam (PtB) 2 to 5 percent slopes, Susquehanna silt loam (SuB), 1 to 5 percent slopes, Susquehanna silt loam (SuD), 5 to 12 percent slopes, and Trebloc silt loam (Tb). All of the soils are 1 to 32% hydric except for the Tb soil which is 66 to 99% hydric ([Appendix II](#)).
- C. **Description of Work:** NorthPoint Development, LLC is proposing to construct an industrial building and associated parking as part of their facilities.

Storm water will be conveyed north and west into an unnamed Tributary of Priests Creek. Particular consideration has been given to maintain controls along the perimeter of the site, the wetland areas and the unnamed tributary to prevent any adverse impacts.

The construction activities will consist of clearing, stripping, and site grading, for the development. There will be no impacts to the wetland areas until approval has been given by the Corps of Engineers. The erosion control plan will be amended as necessary to ensure stability throughout each facet of the planned



project.

Construction Access:

Access to the project site will be along JM Tatum Industrial Drive to the north.

General Storm Water Management Plan:

All storm water runoff will be directed via overland flows north and west off the site. Silt fence will be placed around the north, east and west perimeters of the proposed project site. Sediment basins will be placed in the NW and NE corners of the site. Storm water runoff would then be detained in accordance with Forrest County 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 north and west across the subject property. Storm water that leaves the site will enter the unnamed tributary of Priests Creek. Priests Creek is located approximately 0.5 miles north of the project site.
- G. **Receiving Waters / Established TMDLs:** In accordance with the MDEQ 2020 303 (d) list of impaired streams, Priests Creek is not a listed stream. In addition, no TMDLs have been established for the stream.
- H. **Wetlands:** The site has been evaluated and there are wetlands and other waters that will be impacted by this project. We have submitted a NWP 39 request to the Corps and it is being reviewed under SAM-2022-52. A copy of the Corps submittal is included. All wetland areas will be avoided until authorization is given by the Corps.

### 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 hay wattles, 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 on the north side of the site. Aggregate should be at least six (6) inches thick and 50 feet long using DOT #1 coarse aggregate. The entrance 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 as soon as possible.
- 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 the wetland areas as needed and at any other locations 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 wire-backed silt fence and must be trenched into the ground a minimum of six (6) inches.
- Rock Checks (Temporary Practice) – Rock checks will be installed as shown on the site plan. They will be placed in diversion channels or swales as necessary to slow runoff prior to entering the sediment basins on the north end of the site. Sediment will be removed when the deposits reach one-third to one-half the check height.
- Sediment Basin (Temporary Practice) – Two sediment basins will be installed as shown on the site plan. They will be placed on the north end of the site and will utilize Faircloth skimmers to remove water from the

top of the basin. Basin sizing is described on the site plan. Sediment will be removed when the basin reaches a level of half full.

Exact locations for each of the BMP's are included in [Appendix III](#) within this report.

**C. Vegetative Practices:**

- Temporary Seeding (Temporary Practice) - When a disturbed area will be left undisturbed for fourteen (14) days or more, the appropriate temporary or permanent vegetative practices shall be implemented immediately.
- Permanent Seeding - Permanent stabilization measures shall be initiated in a project area as soon as construction activities have permanently ceased. When weather and/or logistical factors prevent immediate stabilization, measures should be initiated no later than 14 days after the construction activity in that portion of the site has permanently ceased. 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 ([Appendix V](#)).
- Vegetative Buffer - An approximate 25-foot undisturbed natural buffer will be left around waters of the United States where feasible. Where infeasible, additional sediment and erosion controls will be implemented. Silt fence will be double rowed around the wetland areas.
- 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.
- Tree Protection - Efforts will be made to maintain tree buffer areas around the site as stated in the Buffer Zone section of this report. Grading around these sites will be minimal to ensure the trees at these locations will remain as the buffer zone was designed.
- Topsoil - Topsoil will be stockpile and used during the re-vegetation part of the project. When the site reaches final grade, topsoil will be distributed to a minimum depth of 2 inches on 3:1 slopes and 4 inches on flatter slopes.

- D. **Spill Prevention and Response Procedures:** All above-ground fuel storage tanks (AST) shall be double-wall tanks and shall additionally include additional secondary containment measures (dike/berm per US EPA standards). If any fuel storage tanks are present on site, a dike should be constructed around them in order to contain any accidental spillage. All truck mounted tanks shall be double-walled tanks. It is understood that fuel will likely be transported via truck to equipment on the project site. In all circumstances, fuel that is transported on the project site shall be transported within a double-walled tank. The name and number of a competent hazardous waste disposal contractor shall be maintained by the contractor for use in the event of a spill.
- 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.
- E. **Operation and Maintenance:** The best management practices, once implemented, must be maintained to ensure that satisfactory operation continues. The sediment controls and diversions should routinely have excess sediment removed. This may be required following each major storm event. This material should be stockpiled and protected from possible re-entry into the storm water until it can be used.
- 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:** Pre-construction 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.
- 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
- sediment or other pollutants will be periodically removed from control measures, conveyance channels or storm drain inlets

#### 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.
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 residential 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. As site is cleared, maintain BMPs as needed to ensure minimal erosion and sedimentation problems.
12. Perform any temporary seeding as needed and instructed throughout the construction process.
13. Final grading, seeding, sodding, mulching, and fertilizing.
14. Ensure final stabilization is achieved within the project site.
15. Revision of sediment basin to wet detention basin.
16. 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 basins 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. **Vegetative Measures:** Vegetative plantings will be performed in accordance with the planting and seeding schedule found in the Mississippi SWPPP Guidance Manual. Disturbed areas shall be grassed during the first open planting season after completion. Construction should be scheduled in order that un-vegetated exposure is minimized.
- C. **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 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.

- B. **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 site is stabilized.

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 construction was completed.

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.

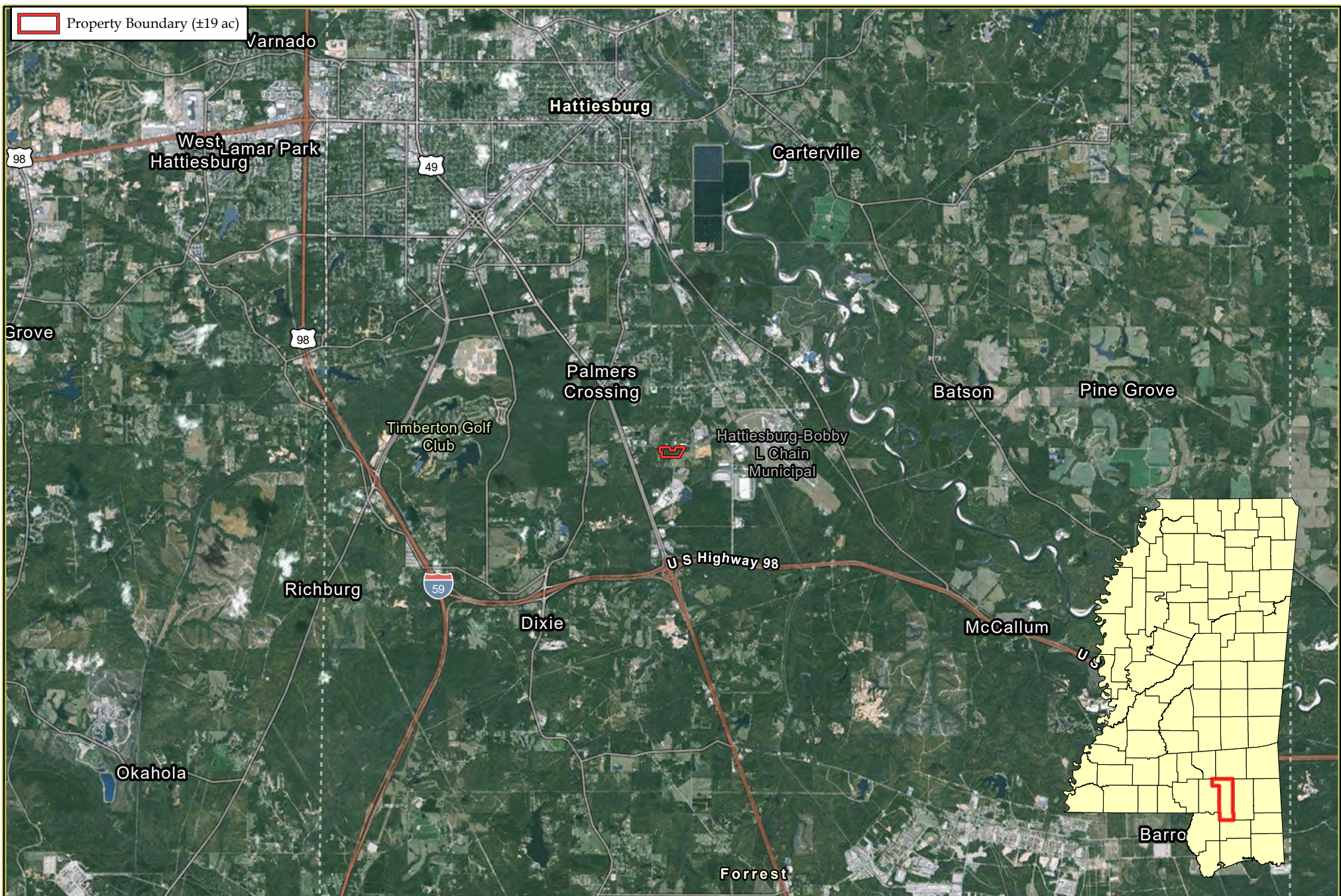
A plan revision will be completed within 30 days of the date if determined that a revision is warranted. If the modification is in response to a request by the Office of Pollution Control, the permittee must submit to the OPC certification that the requested changes have been made.

## **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. APPENDIX I - LOCATION MAPS**

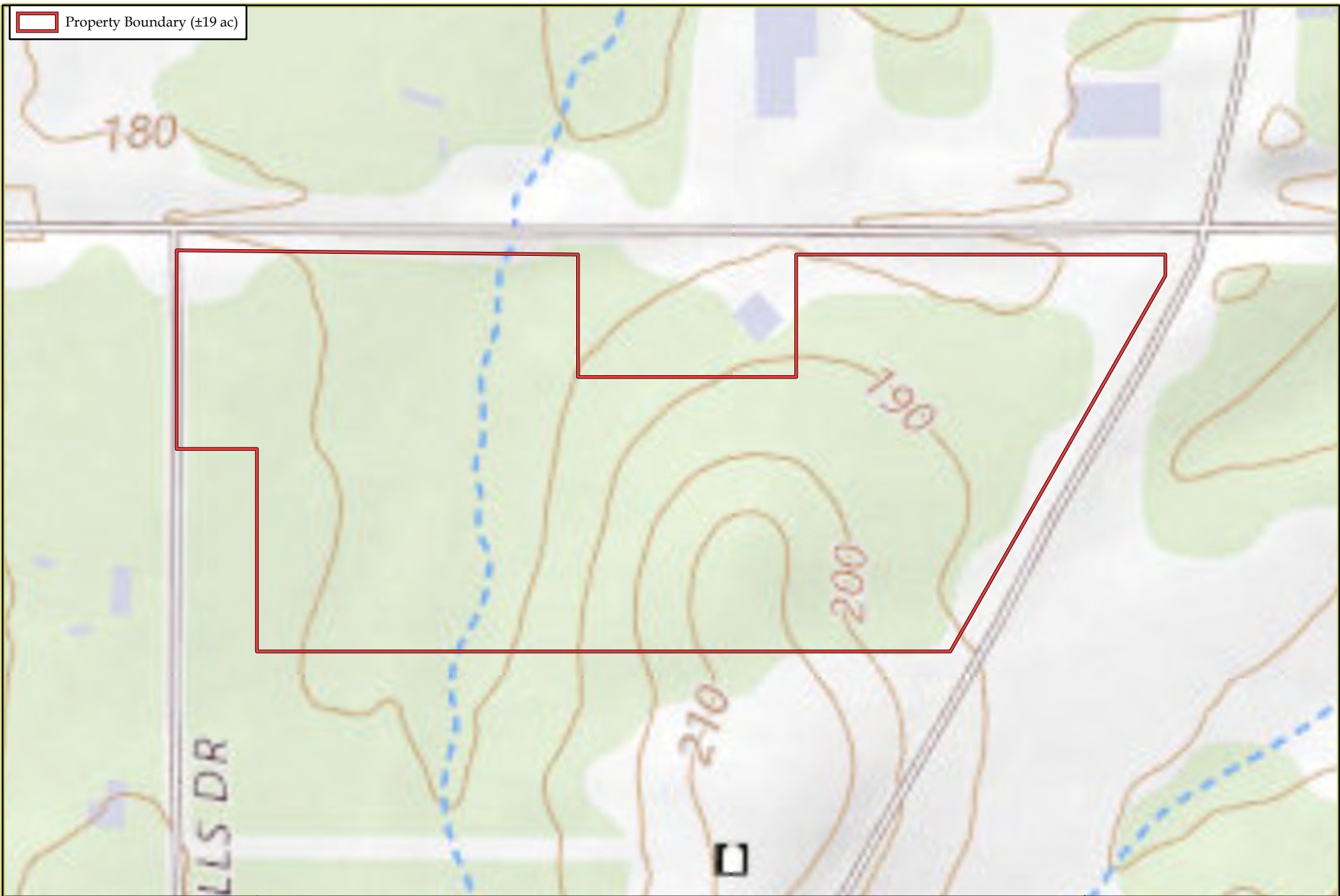




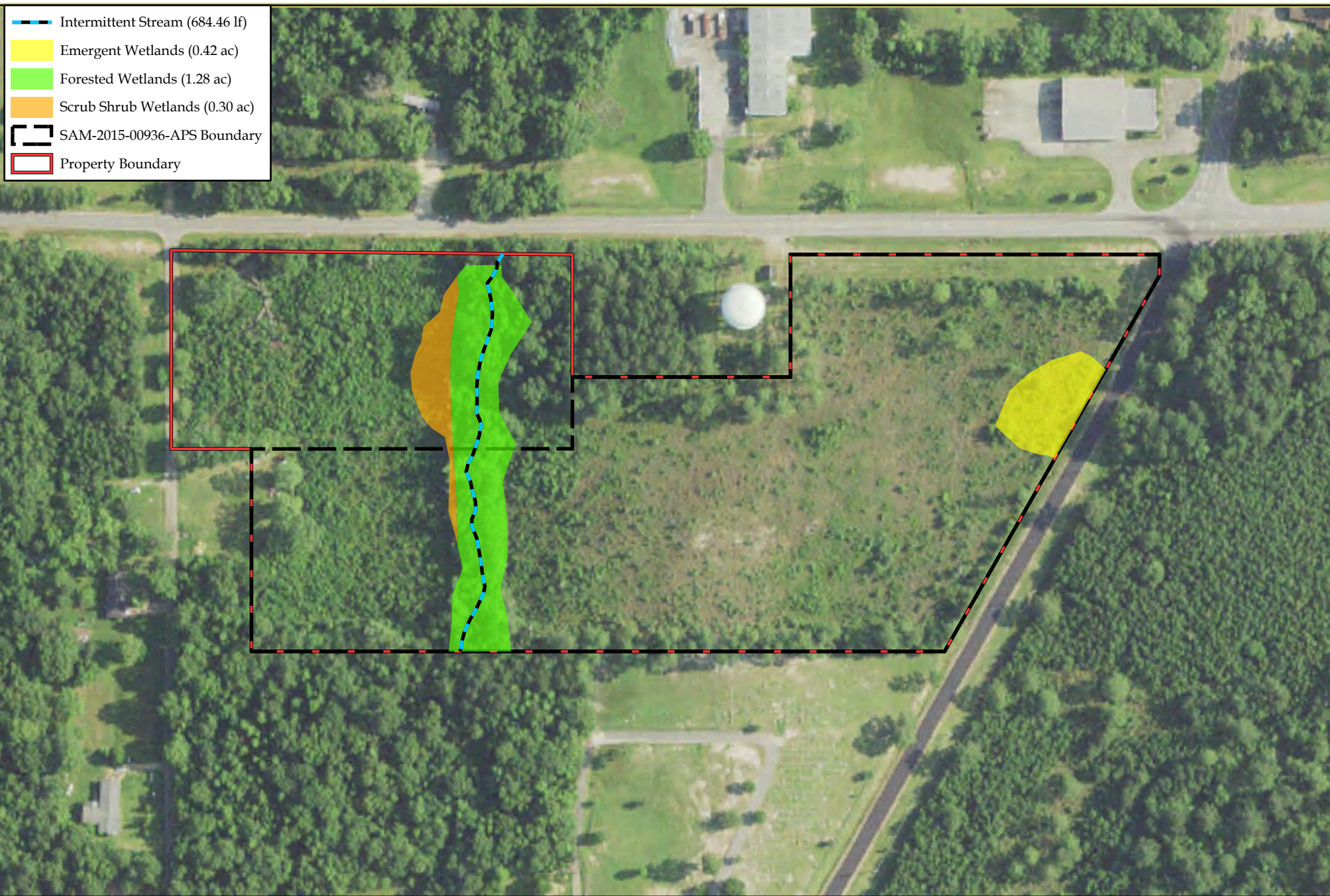




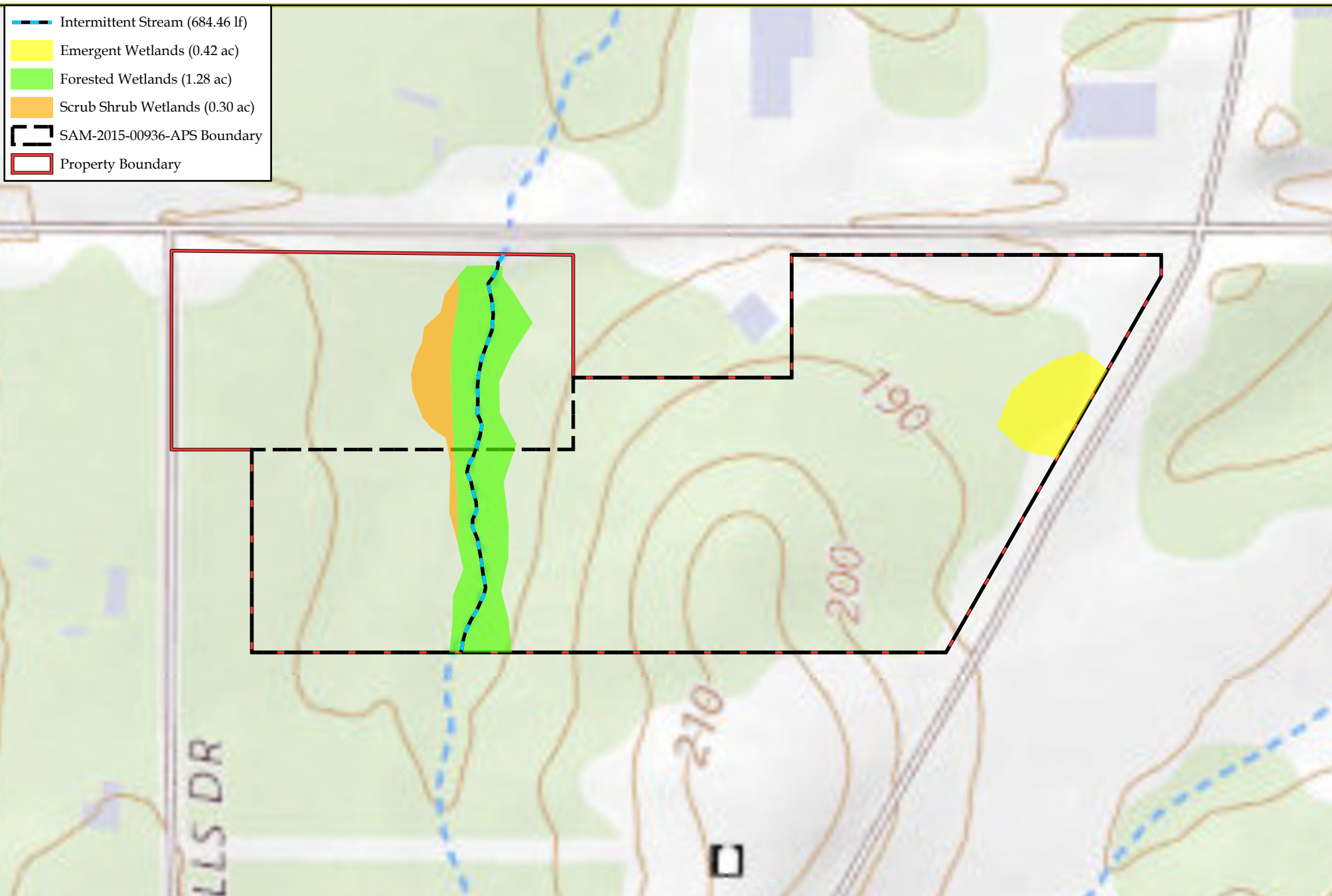












**X. APPENDIX II - SOILS REPORT**



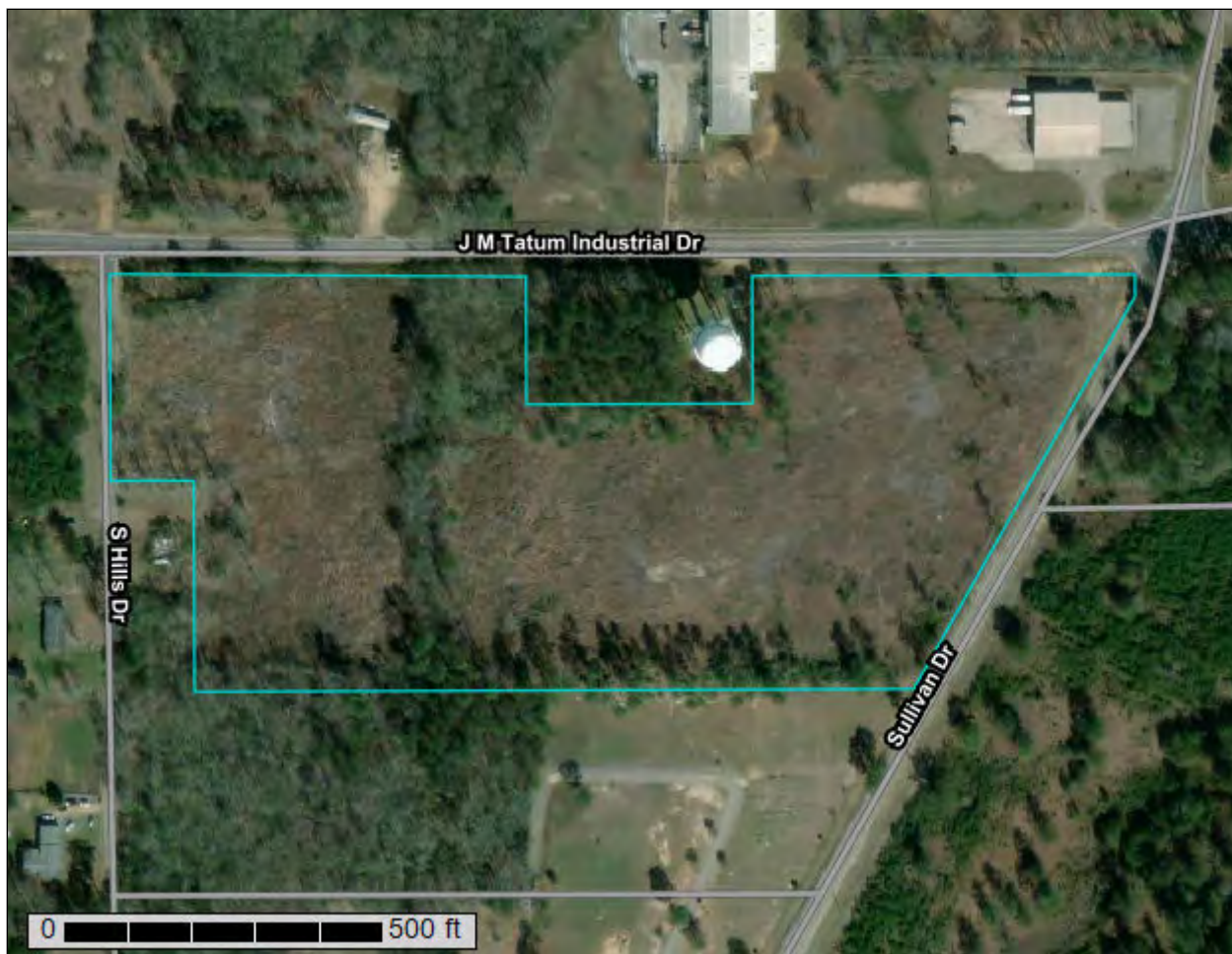
United States  
Department of  
Agriculture

**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 **Forrest County, Mississippi**



February 3, 2022

# Preface

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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](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

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

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

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

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# How Soil Surveys Are Made

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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

## Custom Soil Resource Report

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 (Project Gendreau)



# Custom Soil Resource Report


## 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: Forrest County, Mississippi  
Survey Area Data: Version 17, Sep 8, 2021

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

Date(s) aerial images were photographed: May 17, 2014—Nov 18, 2017

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 (Project Gendreau)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BeC	Benndale fine sandy loam, 5 to 8 percent slopes	7.7	40.3%
PtB	Prentiss loam, 2 to 5 percent slopes	0.3	1.5%
SuB	Susquehanna silt loam, 1 to 5 percent slopes	3.0	15.7%
SuD	Susquehanna silt loam, 5 to 12 percent slopes	7.3	38.5%
Tb	Trebloc silt loam	0.8	4.1%
<b>Totals for Area of Interest</b>		<b>19.1</b>	<b>100.0%</b>

## Map Unit Descriptions (Project Gendreau)

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.

## Custom Soil Resource Report

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.

## Forrest County, Mississippi

### BeC—Benndale fine sandy loam, 5 to 8 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2sywj

*Elevation:* 30 to 380 feet

*Mean annual precipitation:* 57 to 69 inches

*Mean annual air temperature:* 61 to 70 degrees F

*Frost-free period:* 215 to 270 days

*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Benndale and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Benndale

##### Setting

*Landform:* Interfluves

*Landform position (two-dimensional):* Shoulder

*Landform position (three-dimensional):* Side slope, nose slope

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Parent material:* Coarse-loamy fluviomarine deposits derived from sedimentary rock

##### Typical profile

*Ap - 0 to 5 inches:* fine sandy loam

*Bt1 - 5 to 33 inches:* loam

*Bt2 - 33 to 68 inches:* fine sandy loam

*BC - 68 to 73 inches:* sandy loam

##### Properties and qualities

*Slope:* 5 to 8 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Well drained

*Runoff class:* Medium

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.60 to 2.00 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum:* 1.0

*Available water supply, 0 to 60 inches:* Moderate (about 9.0 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3e

*Hydrologic Soil Group:* B

*Hydric soil rating:* No

## Minor Components

### Malbis

*Percent of map unit:* 5 percent  
*Landform:* Fluvio-marine terraces  
*Landform position (two-dimensional):* Shoulder  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

### Fruitdale

*Percent of map unit:* 5 percent  
*Landform:* Fluvio-marine terraces  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

### Atmore

*Percent of map unit:* 5 percent  
*Landform:* Drainhead complexes  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

## PtB—Prentiss loam, 2 to 5 percent slopes

### Map Unit Setting

*National map unit symbol:* 2shtm  
*Elevation:* 130 to 440 feet  
*Mean annual precipitation:* 53 to 69 inches  
*Mean annual air temperature:* 52 to 77 degrees F  
*Frost-free period:* 215 to 310 days  
*Farmland classification:* All areas are prime farmland

### Map Unit Composition

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

### Description of Prentiss

#### Setting

*Landform:* Fluvio-marine terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear

## Custom Soil Resource Report

*Across-slope shape:* Linear

*Parent material:* Coarse-loamy fluviomarine deposits derived from sedimentary rock

### Typical profile

*Ap - 0 to 7 inches:* loam

*Bt - 7 to 26 inches:* loam

*Btx - 26 to 80 inches:* loam

### Properties and qualities

*Slope:* 2 to 5 percent

*Depth to restrictive feature:* 20 to 31 inches to fragipan

*Drainage class:* Moderately 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 30 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water supply, 0 to 60 inches:* Moderate (about 6.4 inches)

### Interpretive groups

*Land capability classification (irrigated):* 2e

*Land capability classification (nonirrigated):* 2e

*Hydrologic Soil Group:* C

*Hydric soil rating:* No

## Minor Components

### Savannah

*Percent of map unit:* 4 percent

*Landform:* Fluviomarine terraces, ridges

*Landform position (two-dimensional):* Shoulder

*Landform position (three-dimensional):* Crest, tread

*Down-slope shape:* Convex, linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

### Benndale

*Percent of map unit:* 2 percent

*Landform:* Interfluves

*Landform position (two-dimensional):* Summit

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Hydric soil rating:* No

### Stough

*Percent of map unit:* 2 percent

*Landform:* Terraces

*Landform position (two-dimensional):* Shoulder

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

**Bibb**

*Percent of map unit:* 2 percent  
*Landform:* Flood-plain steps  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

**SuB—Susquehanna silt loam, 1 to 5 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2w8yr  
*Elevation:* 30 to 380 feet  
*Mean annual precipitation:* 57 to 67 inches  
*Mean annual air temperature:* 61 to 70 degrees F  
*Frost-free period:* 215 to 270 days  
*Farmland classification:* Farmland of statewide importance

**Map Unit Composition**

*Susquehanna and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Susquehanna**

**Setting**

*Landform:* Interfluves  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Clayey fluviomarine deposits derived from sedimentary rock over silty and clayey marine deposits derived from sedimentary rock

**Typical profile**

*Ap - 0 to 2 inches:* silt loam  
*E - 2 to 9 inches:* silt loam  
*Bt - 9 to 31 inches:* clay  
*2Btssg - 31 to 80 inches:* silty clay

**Properties and qualities**

*Slope:* 1 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat poorly drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low (0.01 to 0.14 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None

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*Frequency of ponding:* None

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water supply, 0 to 60 inches:* High (about 9.7 inches)

### Interpretive groups

*Land capability classification (irrigated):* 4e

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* C

*Hydric soil rating:* No

### Minor Components

#### Petal

*Percent of map unit:* 5 percent

*Landform:* Hillslopes

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

#### Freest

*Percent of map unit:* 5 percent

*Landform:* Interfluves

*Landform position (two-dimensional):* Shoulder

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

#### Benndale

*Percent of map unit:* 3 percent

*Landform:* Interfluves

*Landform position (two-dimensional):* Summit

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Hydric soil rating:* No

#### Atmore

*Percent of map unit:* 2 percent

*Landform:* Depressions

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Hydric soil rating:* Yes

## **SuD—Susquehanna silt loam, 5 to 12 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* c4qd  
*Elevation:* 110 to 340 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:* Not prime farmland

### **Map Unit Composition**

*Susquehanna and similar soils:* 85 percent  
*Minor components:* 6 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Susquehanna**

#### **Setting**

*Landform:* Coastal plains  
*Landform position (two-dimensional):* Shoulder  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Clayey marine deposits

#### **Typical profile**

*H1 - 0 to 9 inches:* silt loam  
*H2 - 9 to 68 inches:* clay

#### **Properties and qualities**

*Slope:* 5 to 12 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat poorly drained  
*Runoff class:* 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:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* High (about 10.9 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* D  
*Hydric soil rating:* No



## Minor Components

### Petal

*Percent of map unit:* 4 percent  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

### Unnamed hydric soils (133dr)

*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

## Tb—Trebloc silt loam

### Map Unit Setting

*National map unit symbol:* c4qf  
*Elevation:* 70 to 430 feet  
*Mean annual precipitation:* 60 to 75 inches  
*Mean annual air temperature:* 64 to 70 degrees F  
*Frost-free period:* 270 to 335 days  
*Farmland classification:* Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season

### Map Unit Composition

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

### Description of Trebloc

#### Setting

*Landform:* Terraces  
*Landform position (three-dimensional):* Tread, dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Silty alluvium deposits

#### Typical profile

*H1 - 0 to 7 inches:* silt loam  
*H2 - 7 to 27 inches:* silt loam  
*H3 - 27 to 65 inches:* silty clay loam

#### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches

## Custom Soil Resource Report

*Drainage class:* Poorly drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.60 in/hr)

*Depth to water table:* About 6 to 12 inches

*Frequency of flooding:* FrequentNone

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* High (about 10.1 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 5w

*Hydrologic Soil Group:* C/D

*Hydric soil rating:* Yes

# **Soil Information for All Uses**

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## **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 (Project Gendreau)**

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.

## Custom Soil Resource Report

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.

Custom Soil Resource Report  
Map—Hydric Rating by Map Unit (Project Gendreau)









## 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: Forrest County, Mississippi  
 Survey Area Data: Version 17, Sep 8, 2021

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

Date(s) aerial images were photographed: May 17, 2014—Nov 18, 2017

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 (Project Gendreau)**

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BeC	Benndale fine sandy loam, 5 to 8 percent slopes	5	7.7	40.3%
PtB	Prentiss loam, 2 to 5 percent slopes	2	0.3	1.5%
SuB	Susquehanna silt loam, 1 to 5 percent slopes	2	3.0	15.7%
SuD	Susquehanna silt loam, 5 to 12 percent slopes	2	7.3	38.5%
Tb	Trebloc silt loam	90	0.8	4.1%
<b>Totals for Area of Interest</b>			<b>19.1</b>	<b>100.0%</b>

**Rating Options—Hydric Rating by Map Unit (Project Gendreau)***Aggregation Method: Percent Present*

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The aggregation method "Percent Present" returns the cumulative percent composition of all components of a map unit for which a certain condition is true. For example, attribute "Hydric Rating by Map Unit" returns the cumulative percent composition of all components of a map unit where the corresponding hydric rating is "Yes". Conditions may be simple or complex. At runtime, the user may be able to specify all, some or none of the conditions in question.

*Component Percent Cutoff: None Specified*

Components whose percent composition is below the cutoff value will not be considered. If no cutoff value is specified, all components in the database will be considered. The data for some contrasting soils of minor extent may not be in the database, and therefore are not considered.

*Tie-break Rule: Lower*

## Custom Soil Resource Report

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.



# 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](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](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](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](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=stelpdb1043084>

## Custom Soil Resource Report

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](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](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](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf)

**XI. APPENDIX III - STORM WATER MANAGEMENT PLANS**

# INITIAL GRADING AND LAND CLEARING CONSTRUCTION DOCUMENTS

FOR

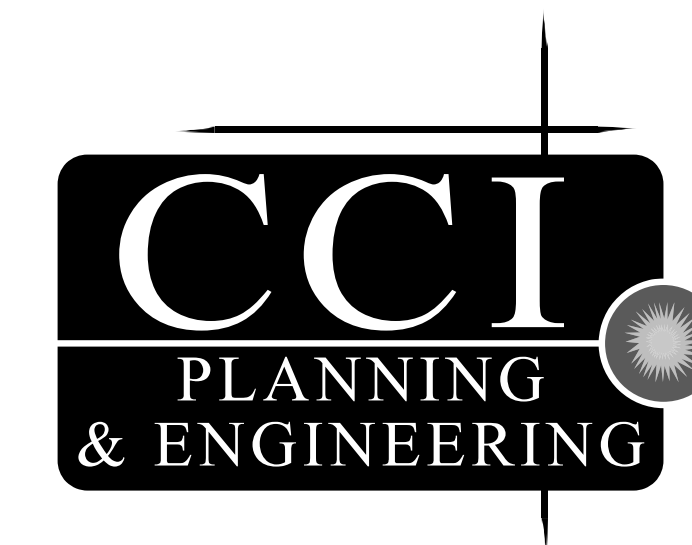
## PROJECT GENDREAU - A WAREHOUSE FACILITY

### HATTIESBURG, MISSISSIPPI

#### DEVELOPER

NORTHPOINT DEVELOPMENT  
4825 NW 41st Street, Suite 500  
Riverside, Missouri 64150

#### PREPARED BY:



3528 Vann Road  
Suite 105  
Birmingham, AL 35235  
Phone: (205) 655-1991  
www.ccipe.com

#### INDEX OF SHEETS

<u>SHEET NUMBER</u>	<u>DESCRIPTION</u>
C-0 .....	COVER SHEET
C-1 .....	EXISTING CONDITIONS
CG-1 .....	INITIAL GRADING PLAN
EC-1 .....	INITIAL EROSION CONTROL PLAN
EC-2 .....	INTERMEDIATE EROSION CONTROL PLAN
EC-3 .....	EROSION CONTROL DETAILS AND SECTIONS

#### LIST OF CONTACTS

DEVELOPER  
NORTHPOINT DEVELOPMENT  
Phone: (314) 239-7830  
Contact: Matt Miltzer  
4825 NW 41st Street, Suite 500  
Riverside, Missouri 64150

SURVEYOR  
LANDMARK SURVEYING, LLC  
Phone: (601) 849-1796  
Contact: Marc A. Broome, P.E., PLS  
109 Main Avenue North  
Magee, Mississippi 39111

CIVIL ENGINEERING  
CIVIL CONSULTANTS, INC.  
Phone: (205) 655-1991  
Contact: J.T. Murphy, PE  
Email: JMurphy@ccipe.com  
3528 Vann Road, Suite 105  
Birmingham, Alabama 35235

NATURAL GAS  
SPIRE, INC.  
Phone: (601) 336-4102  
Contact: Freddie Triplett, Sr.  
315 Main Street  
Hattiesburg, Mississippi 39401

FIRE MARSHALL  
Phone: (601) 467-8818  
Contact: Sean Whittaker  
622 Corinne Street  
Hattiesburg, Mississippi 39401

POWER DISTRIBUTION  
PEARL RIVER VALLEY ELECTRIC POWER ASSOCAIION  
Phone: (601) 264-2458  
Contact: George Cutter  
6803 US Hwy 98  
Hattiesburg, Mississippi 39402

CITY ENGINEER  
Phone: (601) 545-4540  
Contact: Lamar Rutland  
212 West Front Street  
Hattiesburg, Mississippi 39403

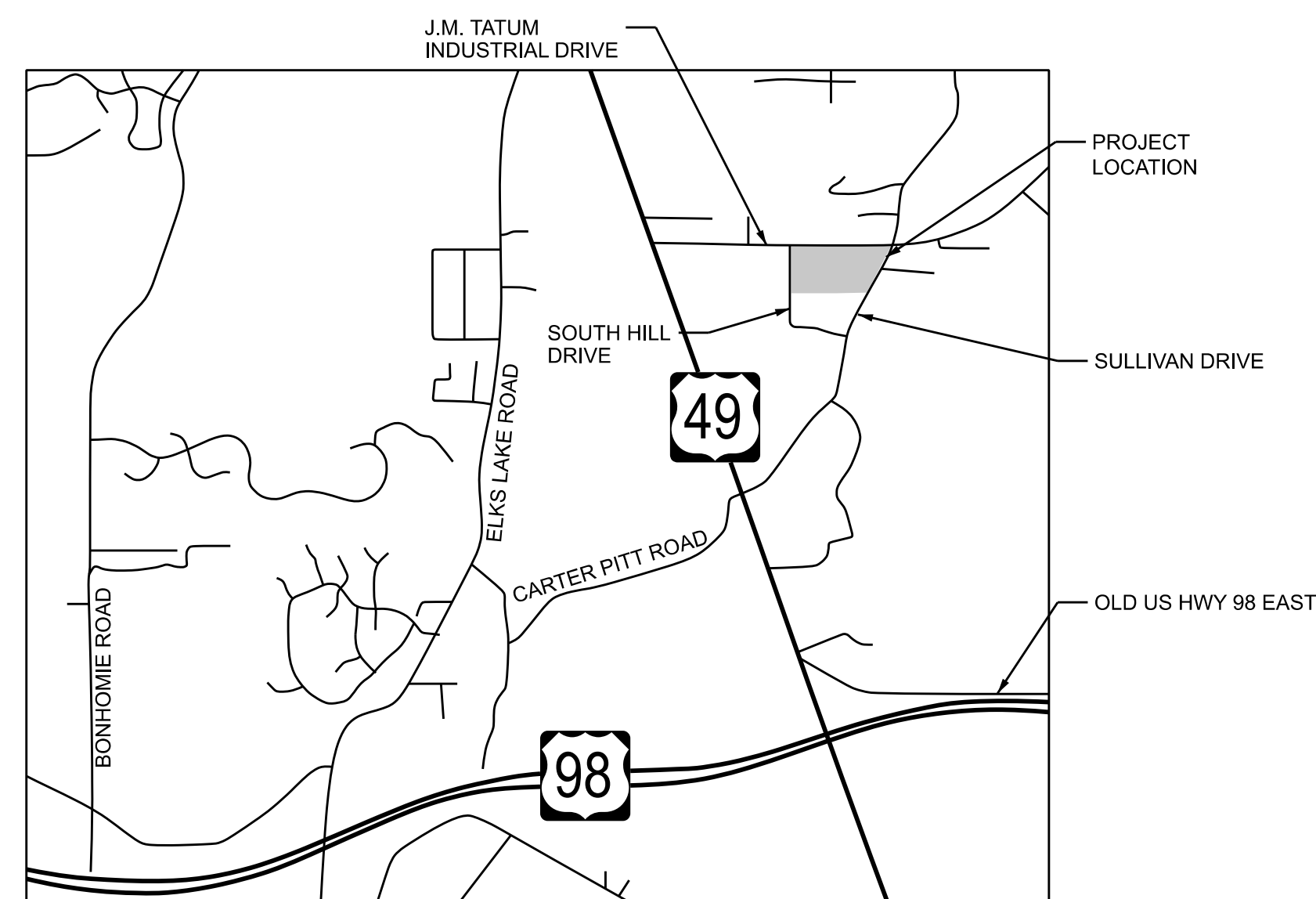
TELEPHONE AND INTERNET  
AT&T  
Phone: (601) 583-8784  
Contact: Scott Carriere  
100 Brunie Street  
Hattiesburg, Mississippi 39401

ENVIRONMENTAL CONSULTANT  
HEADWATERS, INC.  
Phone: (601) 634-0097  
Contact: Clay Cromwell

URBAN DEVELOPMENT DEPARTMENT  
Phone: (601) 545-4591  
Contact: Ginger Lowery

GEOTECHNICAL ENGINEER  
BURNS COOLEY DENNIS, INC.

WATER AND SANITARY SEWER  
ENGINEERING TECHNICIAN SUPERVISOR  
Phone: (601) 545-4542  
Contact: Jerald L. Little  
212 West Front Street  
Hattiesburg, Mississippi 39403



#### VICINITY MAP

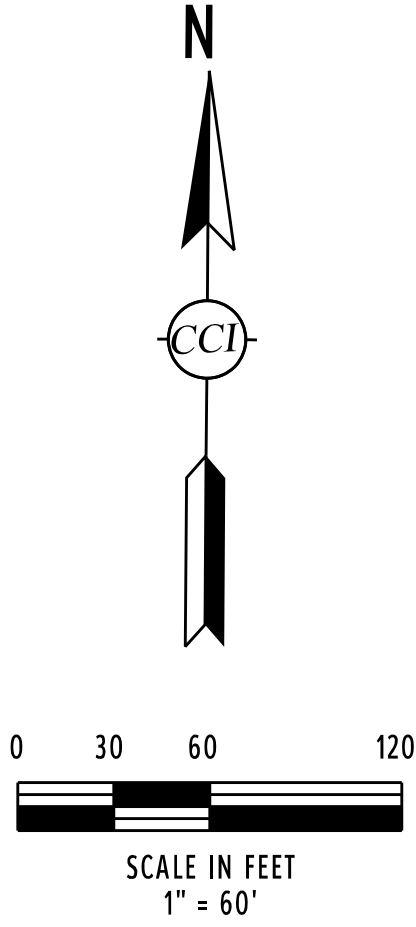
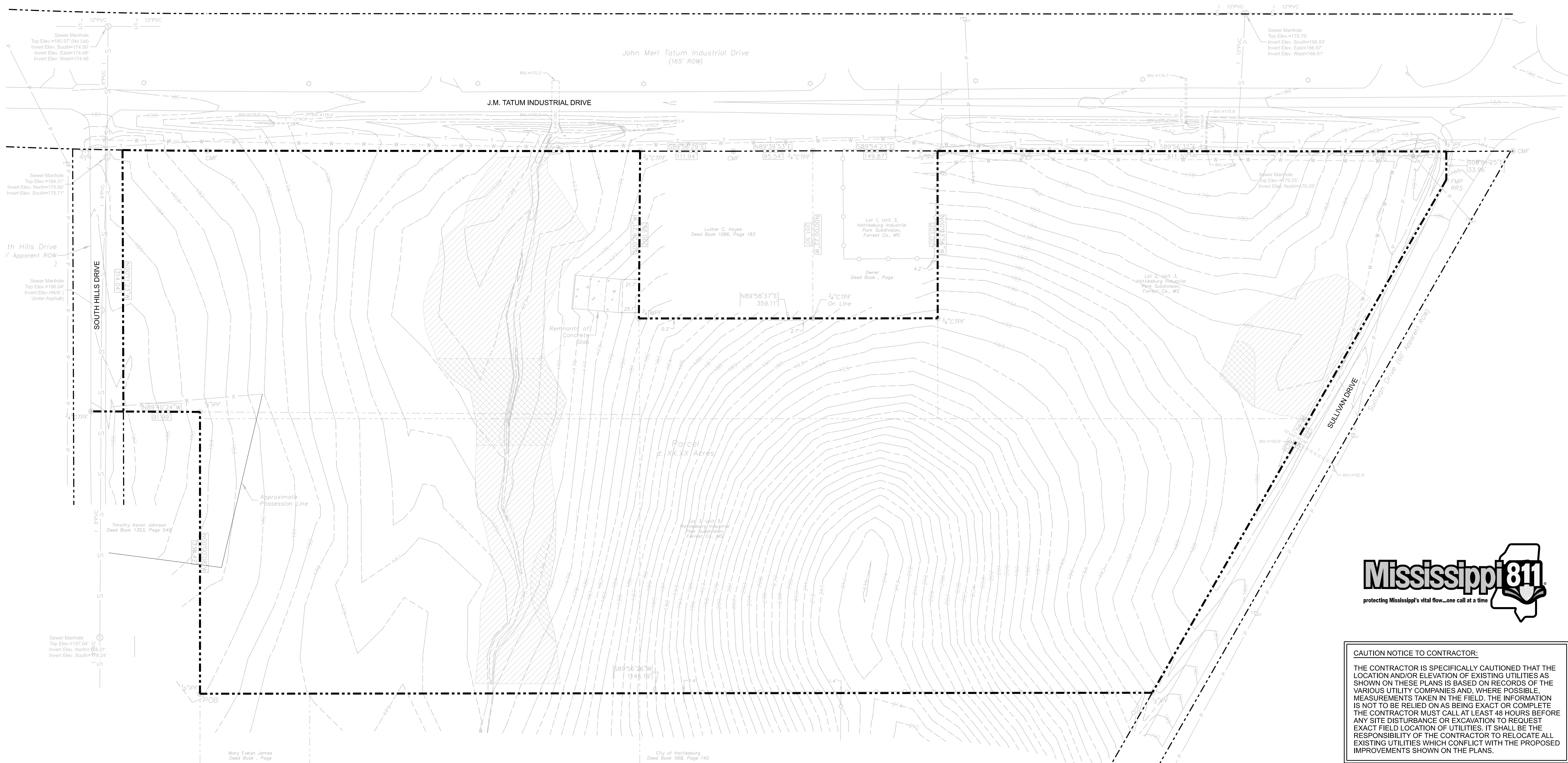
911 ADDRESS  
861 SULLIVAN DRIVE  
HATTIESBURG, MS 39401



#### CAUTION NOTICE TO CONTRACTOR:

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL AT LEAST 48 HOURS BEFORE ANY SITE DISTURBANCE OR EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

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**CAUTION NOTICE TO CONTRACTOR:**

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL AT LEAST 48 HOURS BEFORE ANY SITE DISTURBANCE OR EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

3528 Vann Road  
Suite 105  
Birmingham, AL 35235  
Phone: (205) 655-1991  
www.ccope.com

ENGINEER'S SEAL

PLAN PROVIDED FOR  
REFERENCE ONLY

EXISTING CONDITIONS

PROJECT GENDREAU - A WAREHOUSE FACILITY

HATTIESBURG, MISSISSIPPI

FOR  
NORTHPOINT DEVELOPMENT

DATE: 02/11/2022

PROJECT: SDW0001

DRAWN BY: JTM

CHECKED BY: JTM

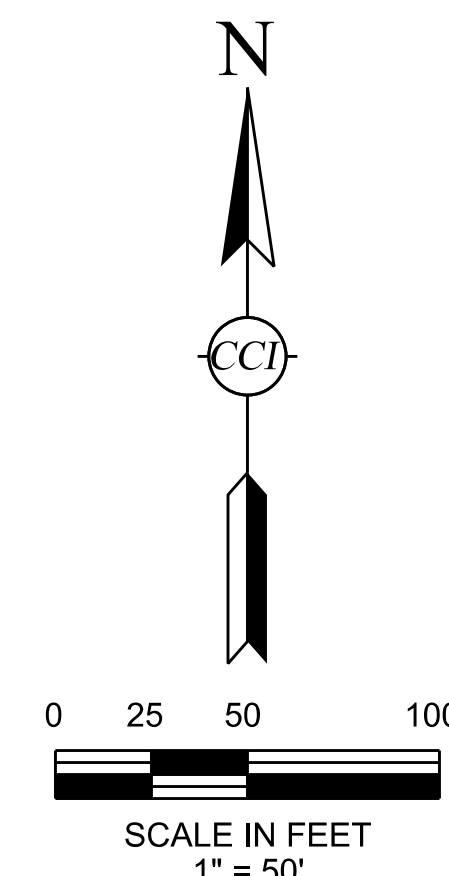
SCALE: 1" = 60'

NO.	DESCRIPTION	BY	CHKD BY	REV.	DATE
0	ISSUED FOR CITY OF HATTIESBURG - LDP AND M&E LCN01	WDD	JTM		02/11/2022

DRAWING NO.

C-1





3. REFERENCE STANDARD NOTES.
2. EARTHWORK SHALL BE PERFORMED ON AN UNCLASSIFIED BASIS.
3. CONTRACTOR SHALL REFERENCE THE GEOTECHNICAL ENGINEERING SERVICES REPORT PREPARED BY BURNS COOLEY DENNIS INC. CONTRACTOR SHALL OBTAIN AND BECOME VERY FAMILIAR WITH THESE REQUIREMENTS AND SHALL IMPLEMENT THEM FOR MATTERS INCLUDING BUT NOT LIMITED TO: PROOFROLLING, UNDERCUTTING, SUITABLE SOILS, LIQUID LIMIT, PLASTICITY INDEX, COMPACTION, SOIL MOISTURE CONTENT, SOIL DRY DENSITY AND SOIL TESTING.
4. SLOPE GRADED PAD OR PROVIDE DRAINAGE AS NECESSARY TO PREVENT SURFACE WATER ACCUMULATION
5. THE LOCATION AND ELEVATION OF EXISTING UTILITIES, AS SHOWN ON THESE PLANS, SHOULD NOT BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING STORM SEWER STRUCTURES, PILES NOT AVAILABLE PRIOR TO CONSTRUCTION, ANY DEVIATIONS FROM PLAN INFORMATION SHOWN AS TOPSOIL DISCUSSED WITH ENGINEER AND OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL CALL APPROPRIATE UTILITY CONTACTS 48 HOURS PRIOR TO EXCAVATION IN AREAS WHERE UTILITIES MAY EXIST.
6. STRIP TOPSOIL FROM THE SITE WHERE EXCAVATION OR GRADING IS INDICATED AND STOCKPILE SEPARATELY FROM OTHER EXCAVATED MATERIAL, WHERE SUFFICIENT SUITABLE EXISTING ON-SITE NATURAL FRIABLE, WELL DRAINED TOPSOIL FREE OF SUBSOIL, STUMPS, ROCKS LARGER THAN 1" DIAMETER, WEEDS, TOXIC SUBSTANCES AND OTHER MATERIAL DETRIMENTAL TO PLANT GROWTH. IF NOT AVAILABLE, THE CONTRACTOR SHALL PROVIDE A BORROW MATERIAL SUITABLE FOR USE AS TOPSOIL. THE AREAS SHALL BE PLANTED AND MULCHED, FERTILIZED AND WATERED AS REQUIRED BY THE LANDSCAPE DESIGN. ROCKS GREATER THAN 1" DIAMETER MUST BE REMOVED. ALL SLOPES AND DISTURBED AREAS NOT COVERED BY BUILDINGS OR PAVEMENT SHALL BE GRADED SMOOTH AND RECEIVE FOUR (4") INCHES OF TOPSOIL.
7. FILL SLOPES SHALL BE OVERFILLED AND THEN CUT BACK TO REQUIRED GEOMETRY.
8. THE CONTRACTOR IS RESPONSIBLE FOR THE FINISHED GRADING INCLUDING PLACEMENT OF SOILS AS NECESSARY TO ACHIEVE THE FINISHED GRADES INDICATED ON THE GRADING PLANS. ALL SURFACES SHALL BE SMOOTH WITH PROPER TRANSITIONS BETWEEN GRADIENTS. ALL FINISHED TOPSOIL ELEVATIONS SHALL BE A MINIMUM OF 1" BELOW THE FINISHED ELEVATION OF ADJACENT WALKS AND BACK OF CURB UNLESS OTHERWISE NOTED.
9. THE CONTRACTOR SHALL CAREFULLY ESTABLISH PROPER FINISHED GRADE ELEVATIONS IN THE FIELD SO AS TO ENSURE POSITIVE DRAINAGE AWAY FROM ALL FUTURE BUILDINGS AND SITE RETAINING WALLS.
10. THE EXPANDED LIMITS OF THE PROPOSED CONSTRUCTION AREAS SHOULD BE WELL DEFINED, INCLUDING THE LIMITS OF THE FILL ZONES FOR BUILDINGS, PAVEMENTS, AND SLOPES, ETC., AT THE TIME OF FILL PLACEMENT. GRADE CONTROLS SHOULD BE MAINTAINED THROUGHOUT THE FILLING OPERATIONS.
11. AT THE END OF EACH WORK DAY, ALL FILL AREAS SHOULD BE GRADED TO FACILITATE DRAINAGE OF ANY PRECIPITATION AND THE SURFACE SHOULD BE SEALED BY USE OF A SMOOTH-DRUM ROLLER TO LIMIT INFILTRATION OF SURFACE WATER. DURING PLACEMENT AND COMPACTION OF NEW FILL AT THE BEGINNING OF EACH WORKDAY, THE CONTRACTOR MAY NEED TO SCARIFY EXISTING SUBGRADES TO A DEPTH ON THE ORDER OF 4 INCHES SO THAT A WEAK PLANE WILL NOT BE FORMED BETWEEN THE NEW FILL AND THE EXISTING SUBGRADE SOILS.
12. POSITIVE SITE DRAINAGE SHOULD BE MAINTAINED DURING EARTHWORK OPERATIONS IN AN EFFORT TO MAINTAIN THE INTEGRITY OF THE SUBGRADE. THE SITE SOILS MAY DEGRADE QUICKLY WITH DISTURBANCE FROM CONTRACTOR OPERATIONS AND WILL BE EXTREMELY DIFFICULT TO STABILIZE FOR FILL PLACEMENT. CONSEQUENTLY, THE CONTRACTOR SHOULD BE PREPARED TO IMPLEMENT AGGRESSIVE MECHANICAL OR CHEMICAL DRYING, DEPENDING UPON THE ACTUAL SITE CONDITIONS; IF POSSIBLE MAKE GRADING FOR THE PROJECT SHOULD BE PERFORMED DURING THE DRIER SUMMER MONTHS TO THE MAXIMUM EXTENT POSSIBLE. IF WATER MUST BE ADDED TO RAISE THE MOISTURE CONTENT OF THE SOIL, IT SHOULD BE UNIFORMLY APPLIED AND THOROUGHLY MIXED INTO THE SOIL.

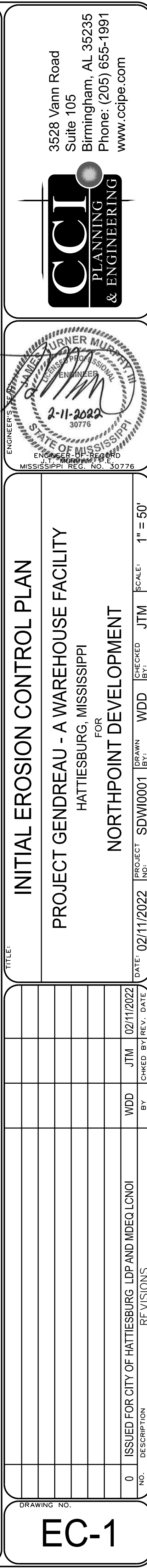
1. ALL WORK SHOWN SHALL BE PERFORMED IN ACCORDANCE WITH THE PLANS FOR THIS PROJECT AND SHALL CONFORM TO ALL CODES, ORDINANCES, RESTRICTIONS, AND STANDARDS OF ALL GOVERNING AGENCIES HAVING JURISDICTION OVER THE SITE. CONTRACTOR WILL ONLY PERFORM CONSTRUCTION ACTIVITIES BASED ON PLANS PROPERLY ISSUED FOR CONSTRUCTION PURPOSES.
2. CONTRACTOR SHALL ENSURE ALL NECESSARY PERMITS AND APPROVALS FROM AGENCIES GOVERNING THIS WORK ARE SECURED PRIOR TO BEGINNING CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL PROPERTY CORNERS AND BENCHMARKS. ALL PROPERTY PINS OR BENCHMARKS ELIMINATED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED BY CONTRACTOR'S LICENSED SURVEYOR AT NO EXPENSE TO OWNER.
4. EXISTING UTILITY LINES SHOWN ARE APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LINE LOCATIONS PRIOR TO BEGINNING CONSTRUCTION. ANY DEVIATIONS FROM THE DESIGN LOCATIONS SHALL BE REPORTED TO THE OWNER OR THE ENGINEER PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CALL APPROPRIATE UTILITY CONTACTS 48 HOURS PRIOR TO EXCAVATION IN AREAS WHERE UTILITIES MAY EXIST.
5. BOUNDARY AND TOPOGRAPHIC SURVEY WAS PREPARED BY LANDMARK SURVEYING, LLC. CIVIL CONSULTANTS, INC. WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY.
6. THE LIMITS OF DISTURBANCE SHALL INCLUDE ALL AREAS DISTURBED BY GRADING OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL AREAS OUTSIDE THE LIMITS OF DISTURBANCE. ANY DAMAGE CAUSED BY CONSTRUCTION SHALL BE REPAIRED TO ITS ORIGINAL CONDITION BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
7. EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO LAND DISTURBING ACTIVITIES. EROSION CONTROL DEVICES SHALL BE INSPECTED DAILY AND BE PROPERLY MAINTAINED THROUGHOUT CONSTRUCTION UNTIL PERMANENT GROUND COVER IS ESTABLISHED.

8. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY PROTECTIVE DEVICES AND FOR THE IMPLEMENTATION OF ALL SAFETY MEASURES INCLUDING, BUT NOT LIMITED TO THE PROTECTION OF LIFE, PROPERTY, AND SITE IMPROVEMENTS; THE PROTECTION OF EXISTING UTILITY LINES AND STRUCTURES; AND THE PROVISION AND COORDINATION OF ALL TEMPORARY TRAFFIC CONTROL EFFORTS AND MEASURES.
9. JOB SITE SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SMOOTH TRANSITION BETWEEN ALL NEW CONSTRUCTION AND ALL EXISTING CONDITIONS. ALL DRIVEWAY TRANSITION GRADES, CONSTRUCTION MATERIALS, AND FINISHES, ARE SUBJECT TO APPROVAL BY THE ENGINEER.
11. DO NOT SCALE CRITICAL DIMENSIONS FROM THIS DRAWING, CONTACT ENGINEER FOR SPECIFIC CLARIFICATIONS NEEDED.
12. CONTRACTOR TO REFER TO GEOTECHNICAL REPORT FOR ALL SUBGRADE PREPARATION SPECIFICATIONS.
13. IN THE EVENT THAT A CONFLICT ARISES BETWEEN THE SITE CONSTRUCTION DRAWINGS OR SPECIFICATIONS AND EXISTING STRUCTURES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND SHALL NOT PROCEED WITH CONSTRUCTION OF ANY AREA WHERE A CONFLICT HAS BEEN DISCOVERED UNTIL SUCH TIME AS THE CONFLICT HAS BEEN CLEARLY RESOLVED.
14. SITE CONTRACTOR SHALL SUPPLY AS- BUILT PLANS INDICATING ALL CHANGES AND DEVIATIONS FROM THE DESIGN DOCUMENTS. SITE CONTRACTOR SHALL ALSO PROVIDE AS-BUILTS, AS PART OF THE CONTRACT, FOR STORM, SANITARY AND WATER LINES.
15. CONTRACTOR SHALL REPAIR DAMAGE TO EXISTING PUBLIC INFRASTRUCTURE TO THE SATISFACTION OF THE CITY OF HATTIESBURG.

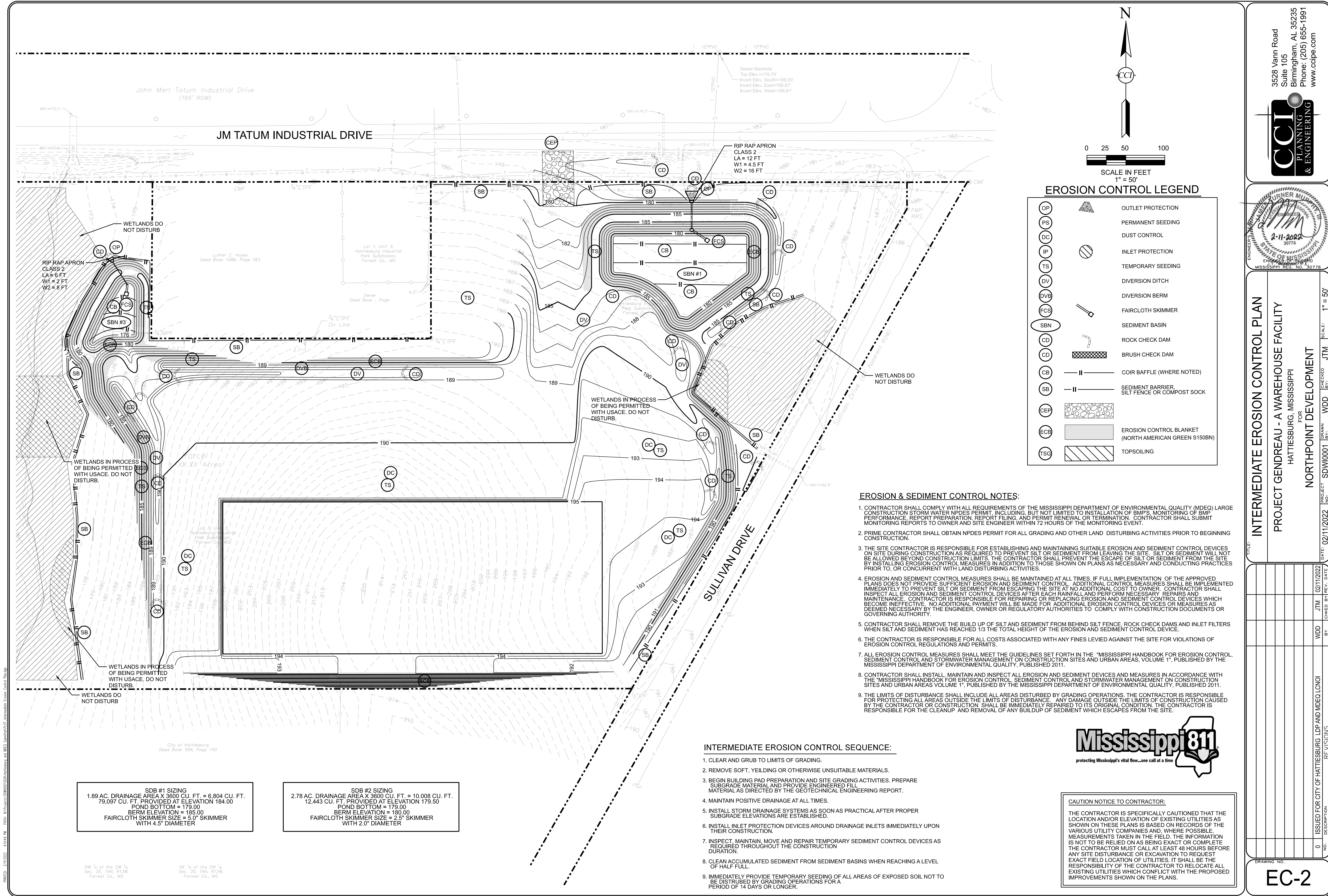
CAUTION NOTICE TO CONTRACTOR:

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EROSION CONTROL LEGEND

OP		OUTLET PROTECTION
PS		PERMANENT SEEDING
DC		DUST CONTROL
IP		INLET PROTECTION
TS		TEMPORARY SEEDING
DV		DIVERSION DITCH
DVB		DIVERSION BERM
FCS		FAIRCLOTH SKIMMER
SBN		SEDIMENT BASIN
CD		ROCK CHECK DAM
CD		BRUSH CHECK DAM
CB		COIR BAFFLE (WHERE NOTED)
SB		SEDIMENT BARRIER, SILT FENCE OR COMPOST SOCK
CEF		EROSION CONTROL BLANKET (NORTH AMERICAN GREEN S150BN)
ECB		
TSG		TOPSOILING

EROSION & SEDIMENT CONTROL NOTES:

- CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY (MDEQ) LARGE CONSTRUCTION STORM WATER NPDES PERMIT, INCLUDING, BUT NOT LIMITED TO INSTALLATION OF BMP'S, MONITORING OF BMP PERFORMANCE, REPORT PREPARATION, REPORT FILING, AND PERMIT RENEWAL OR TERMINATION. CONTRACTOR SHALL SUBMIT MONITORING REPORTS TO OWNER AND SITE ENGINEER WITHIN 72 HOURS OF THE MONITORING EVENT.
- PRIME CONTRACTOR SHALL OBTAIN NPDES PERMIT FOR ALL GRADING AND OTHER LAND DISTURBING ACTIVITIES PRIOR TO BEGINNING CONSTRUCTION.
- THE SITE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SUITABLE EROSION AND SEDIMENT CONTROL DEVICES ON SITE DURING CONSTRUCTION AS REQUIRED TO PREVENT SILT OR SEDIMENT FROM LEAVING THE SITE. SILT OR SEDIMENT WILL NOT BE ALLOWED BEYOND CONSTRUCTION LIMITS. THE CONTRACTOR SHALL PREVENT THE ESCAPE OF SILT OR SEDIMENT FROM THE SITE BY INSTALLING EROSION CONTROL MEASURES IN ADDITION TO THOSE SHOWN ON PLANS AS NECESSARY AND CONDUCTING PRACTICES PRIOR TO, OR CONCURRENT WITH LAND DISTURBING ACTIVITIES.
- EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLANS DOES NOT PROVIDE SUFFICIENT EROSION AND SEDIMENT CONTROL, ADDITIONAL CONTROL MEASURES SHALL BE IMPLEMENTED IMMEDIATELY TO PREVENT SILT OR SEDIMENT FROM ESCAPING THE SITE AT NO ADDITIONAL COST TO OWNER. CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL DEVICES AFTER EACH RAINFALL AND PERFORM NECESSARY REPAIRS AND MAINTENANCE. CONTRACTOR IS RESPONSIBLE FOR REPAIRING OR REPLACING EROSION AND SEDIMENT CONTROL DEVICES WHICH BECOME INEFFECTIVE. NO ADDITIONAL PAYMENT WILL BE MADE FOR ADDITIONAL EROSION CONTROL DEVICES OR MEASURES AS DEEMED NECESSARY BY THE ENGINEER, OWNER OR REGULATORY AUTHORITIES TO COMPLY WITH CONSTRUCTION DOCUMENTS OR GOVERNING AUTHORITY.
- CONTRACTOR SHALL REMOVE THE BUILD UP OF SILT AND SEDIMENT FROM BEHIND SILT FENCE, ROCK CHECK DAMS AND INLET FILTERS WHEN SILT AND SEDIMENT HAS REACHED 1/3 THE TOTAL HEIGHT OF THE EROSION AND SEDIMENT CONTROL DEVICE.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ANY FINES LEVIED AGAINST THE SITE FOR VIOLATIONS OF EROSION CONTROL REGULATIONS AND PERMITS.
- ALL EROSION CONTROL MEASURES SHALL MEET THE GUIDELINES SET FORTH IN THE "MISSISSIPPI HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL AND STORMWATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS, VOLUME 1", PUBLISHED BY THE MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY, PUBLISHED 2011.
- CONTRACTOR SHALL INSTALL, MAINTAIN AND INSPECT ALL EROSION AND SEDIMENT DEVICES AND MEASURES IN ACCORDANCE WITH THE "MISSISSIPPI HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL AND STORMWATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS VOLUME 1", PUBLISHED BY THE MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY, PUBLISHED 2011.
- THE LIMITS OF DISTURBANCE SHALL INCLUDE ALL AREAS DISTURBED BY GRADING OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL AREAS OUTSIDE THE LIMITS OF DISTURBANCE. ANY DAMAGE OUTSIDE THE LIMITS OF CONSTRUCTION CAUSED BY THE CONTRACTOR OR CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED TO ITS ORIGINAL CONDITION. THE CONTRACTOR IS RESPONSIBLE FOR THE CLEANUP AND REMOVAL OF ANY BUILDUP OF SEDIMENT WHICH ESCAPES FROM THE SITE.

INTERMEDIATE EROSION CONTROL SEQUENCE:

- CLEAR AND GRUB TO LIMITS OF GRADING.
- REMOVE SOFT, YEILDING OR OTHERWISE UNSUITABLE MATERIALS.
- BEGIN BUILDING PAD PREPARATION AND SITE GRADING ACTIVITIES. PREPARE SUBGRADE MATERIAL AND PROVIDE ENGINEERED FILL MATERIAL AS DIRECTED BY THE GEOTECHNICAL ENGINEERING REPORT.
- MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
- INSTALL STORM DRAINAGE SYSTEMS AS SOON AS PRACTICAL AFTER PROPER SUBGRADE ELEVATIONS ARE ESTABLISHED.
- INSTALL INLET PROTECTION DEVICES AROUND DRAINAGE INLETS IMMEDIATELY UPON THEIR CONSTRUCTION.
- INSPECT, MAINTAIN, MOVE AND REPAIR TEMPORARY SEDIMENT CONTROL DEVICES AS REQUIRED THROUGHOUT THE CONSTRUCTION DURATION.
- CLEAN ACCUMULATED SEDIMENT FROM SEDIMENT BASINS WHEN REACHING A LEVEL OF HALF FULL.
- IMMEDIATELY PROVIDE TEMPORARY SEEDING OF ALL AREAS OF EXPOSED SOIL NOT TO BE DISTURBED BY GRADING OPERATIONS FOR A PERIOD OF 14 DAYS OR LONGER.



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3528 Vann Road  
Suite 105  
Birmingham, AL 35235  
Phone: (205) 655-1991  
www.ccope.com

INTERMEDIATE EROSION CONTROL PLAN  
PROJECT GENDREAU - A WAREHOUSE FACILITY  
HATTIESBURG, MISSISSIPPI  
FOR  
NORTHPOINT DEVELOPMENT

DATE: 02/11/2022  
BY: JTM  
CHECKED: WDD  
PROJECT: SDW0001  
DRAWN: JTM  
SCALE: 1" = 50'

REVISIONS  
NO. DESCRIPTION  
0 ISSUED FOR CITY OF HATTIESBURG LDP AND MDEQ LCM01

DRAWING NO.  
EC-2



MINIMUM BUILDING SETBACK REQUIREMENTS (FCIP COVENANTS)

FRONT: 50 FEET  
REAR: 25 FEET  
SIDE: 25 FEET

AREA AND DIMENSIONAL REGULATIONS (LAND DEVELOPMENT CODE [LDC])

MINIMUM LOT AREA: NONE  
MINIMUM WIDTH AT SETBACK: 100 FEET  
MAXIMUM BUILDING HEIGHT: (75 FEET ABOVE THE CURB LINE)  
MAXIMUM FLOOR AREA RATIO: 0.75  
MAXIMUM IMPERVIOUS SURFACE LOT COVERAGE: 60%  
BUFFER (AGRICULTURAL): 60 FEET\*

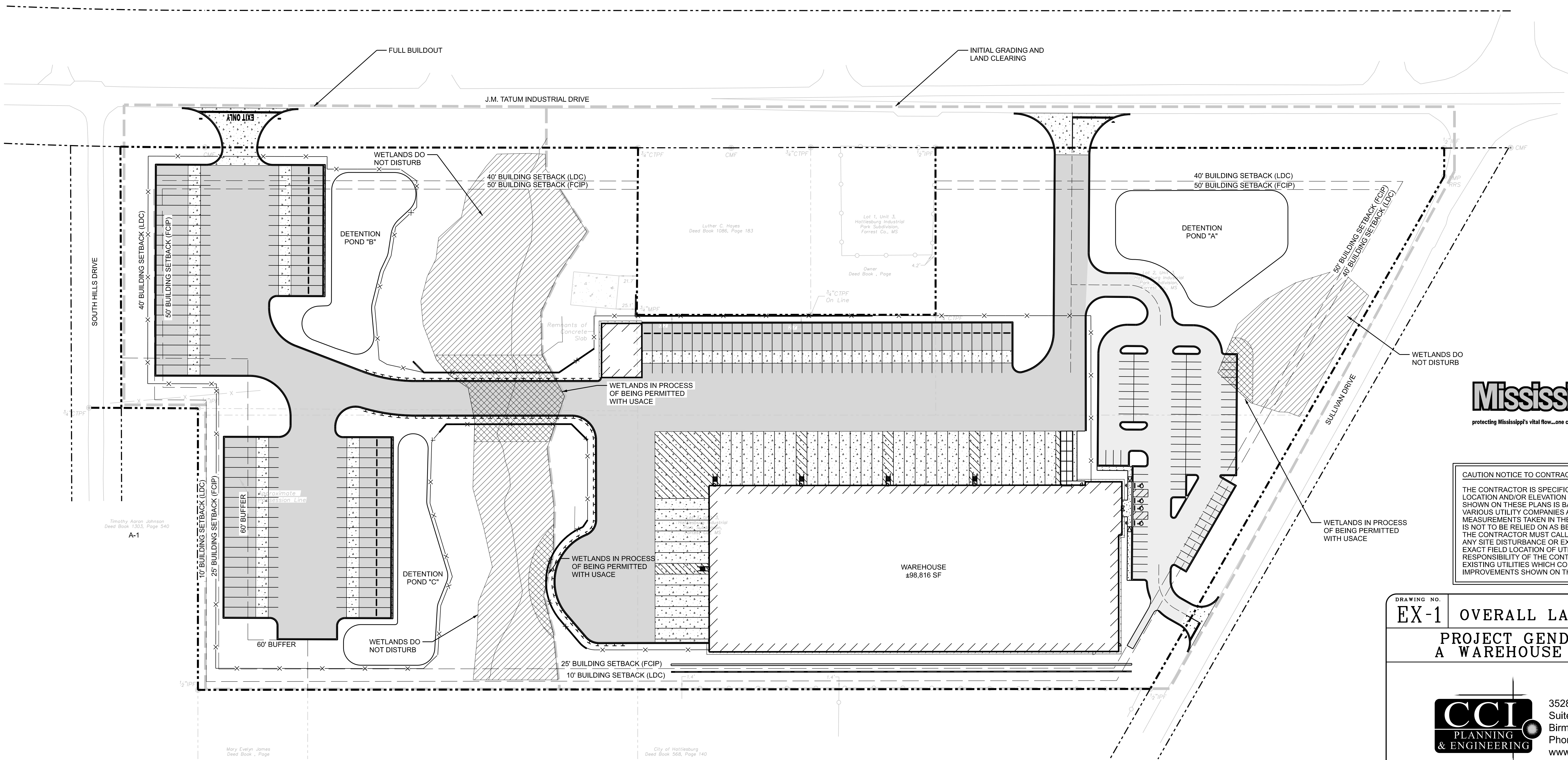
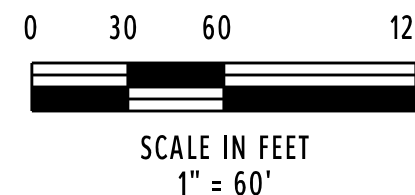
MINIMUM BUILDING SETBACK REQUIREMENTS (LAND DEVELOPMENT CODE [LDC])

FRONT: 40 FEET MIN./40 FEET MAX.\*  
REAR: 0 FEET  
SIDE: 0 FEET OR 10 FEET

\*VARIANCES HAVE BEEN PRESENTED TO AND APPROVED BY BOA

SITE DATA TABLE

SITE AREA: ±18.89 ACRES  
AREA DISTURBED: ±14.37 ACRES  
IMPERVIOUS AREA: ±9.26 ACRES (49%)



CAUTION NOTICE TO CONTRACTOR:

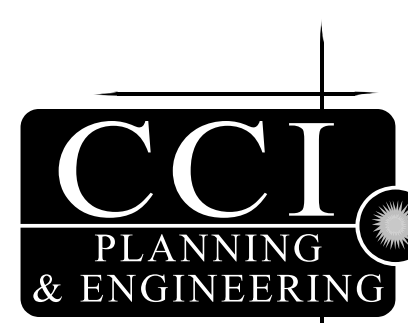
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DRAWING NO.

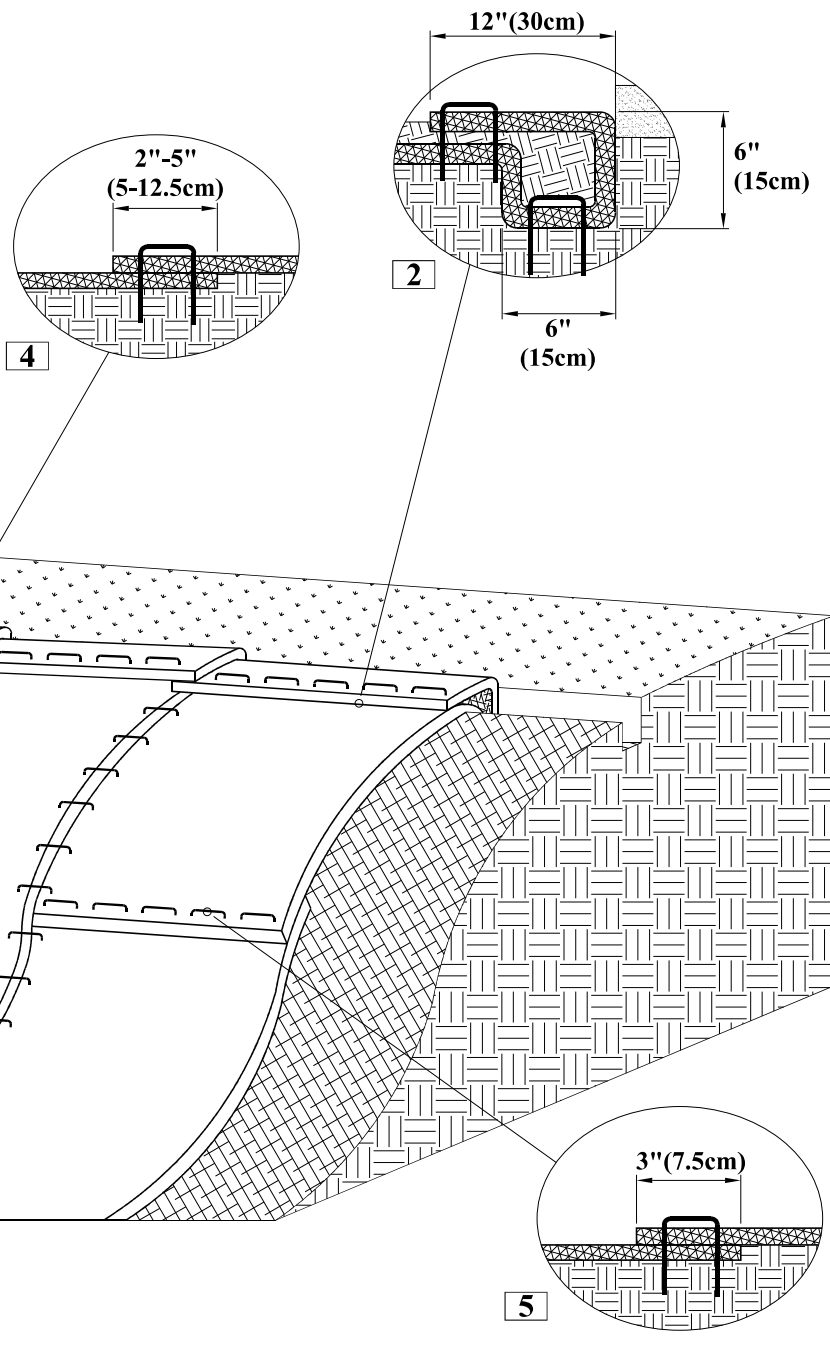
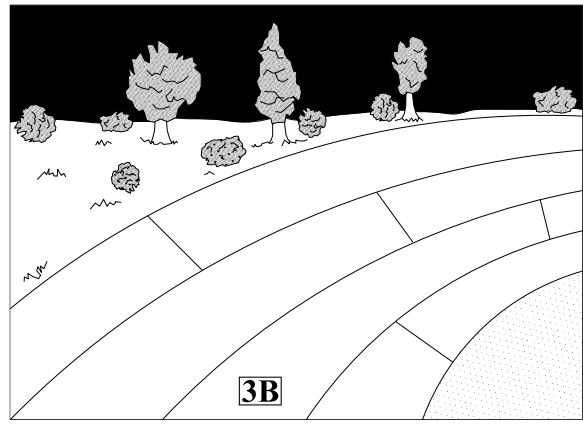
EX-1

OVERALL LAYOUT PLAN

PROJECT GENDREAU -  
A WAREHOUSE FACILITY



3528 Vann Road  
Suite 105  
Birmingham, AL 35235  
Phone: (205) 655-1991  
www.ccipe.com

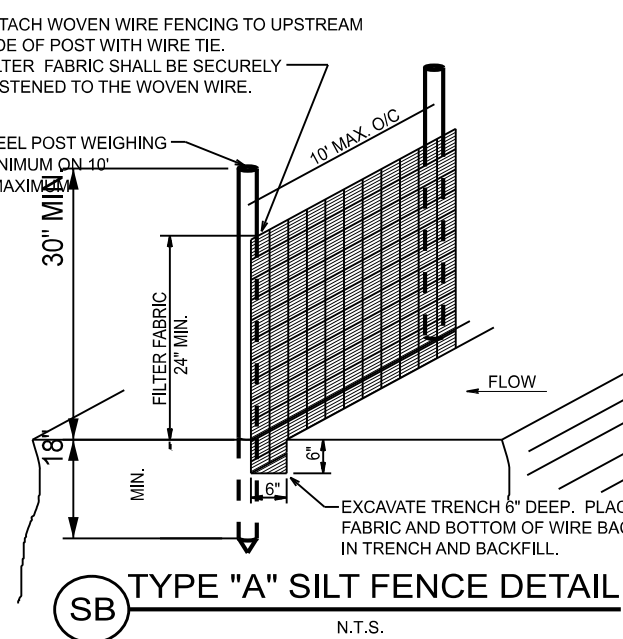


### SLOPE INSTALLATION DETAIL

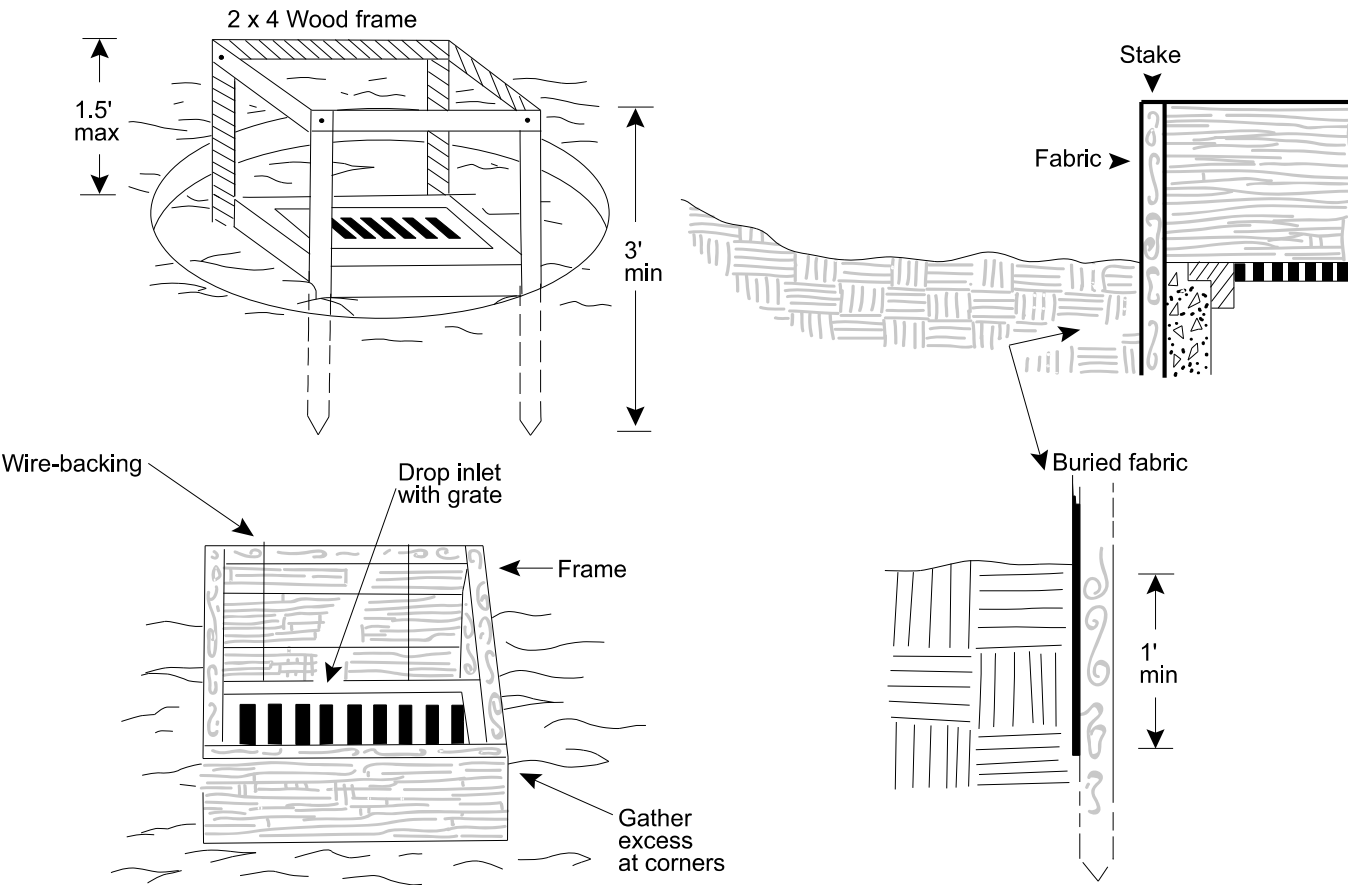
1. Prepare soil before installing rolled erosion control products (RECPs), including any necessary application of lime, fertilizer, and seed.
2. Begin at the top of the slope by anchoring the RECPs in a 6"(15cm) deep X 6"(15cm) wide trench with approximately 12" (30cm) of RECPs extended beyond the up-slope portion of the trench. Anchor the RECPs with a row of staples/stakes approximately 12" (30cm) apart in the bottom of the trench. Backfill and compact the trench after stapping. Apply seed to the compacted soil and fold the remaining 12"(30cm) portion of RECPs back over the seed and compacted soil. Secure RECPs over compacted soil with a row of staples/stakes spaced approximately 12"(30cm) apart across the width of the RECPs.
3. Roll the RECPs (A) down or (B) horizontally across the slope. RECPs will unroll with appropriate side against the soil surface. All RECPs must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide.
4. The edges of parallel RECPs must be stapled with approximately 2" - 5" (5-12.5cm) overlap depending on the RECPs type.
5. Consecutive RECPs spliced down the slope must be end over end (Shingle style) with an approximate 3"(7.5cm) overlap. Staple through overlapped area, approximately 12"(30cm) apart across entire RECPs width.

NOTE: In loose soil conditions, the use of staples or stake lengths greater than 6"(15cm) may be necessary to properly secure the RECPs.

SILT FENCE SPECIFICATIONS			
TENSILE STRENGTH (LBS MIN ASTM D-4832)	WARP - 260	FILL - 100	
ELONGATION % MAX (ASTM D-4832)	40		
APPARENT OPENING SIZE (MAX SIEVE) (ASTM D-4751)	170.30		
FLOW RATE (GAL/MIN/SQ.FT.) (GDT-87)	70		
BURSTING STRENGTH (PSI MIN) (ASTM D-4756)	175		
MINIMUM FABRIC WIDTH (IN)	36		

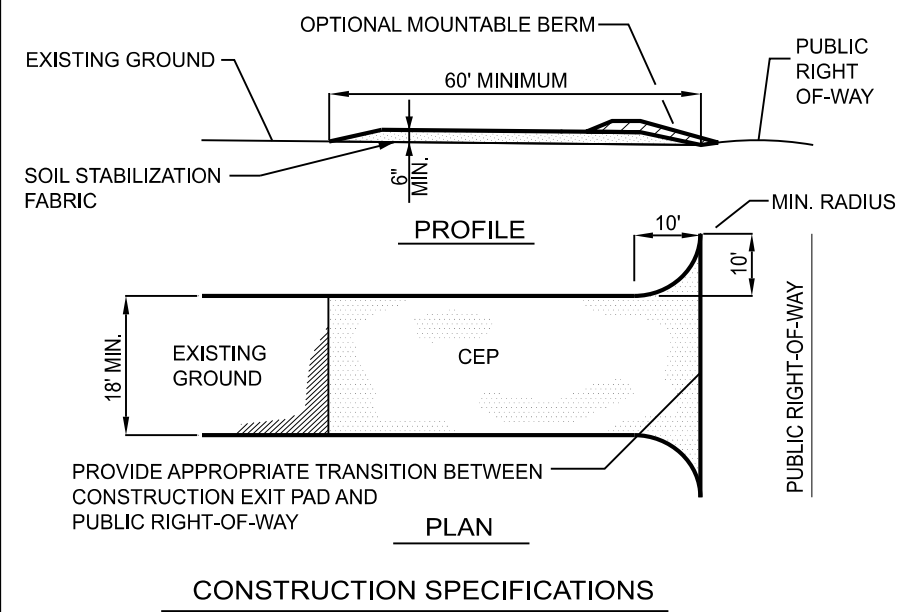


NOTE: INSPECT SILT FENCING AFTER EACH RAINFALL. CLEAN OR REPLACE SILT FENCE WHEN SILT REACHES 25% OF THE FENCE HEIGHT.



### IP SILT FENCE INLET PROTECTION

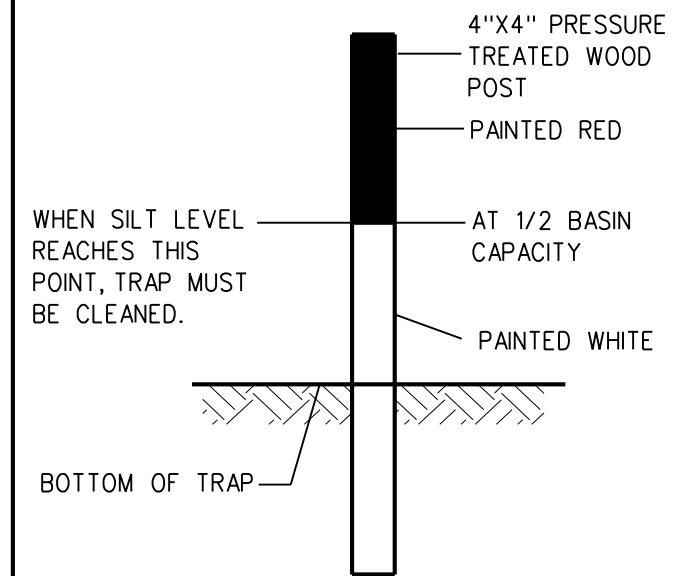
N.T.S.  
(FOR USE IN LANDSCAPE AREA OR PAVED AREAS PRIOR TO BASE COURSE INSTALLATION)



1. STONE SIZE: #4 WASHED STONE.
2. LENGTH: AS EFFECTIVE, BUT NOT LESS THAN 60 FT. (WITH THE EXCEPTION OF 3. THICKNESS: NOT LESS THAN 6 INCHES.
4. WIDTH: 18 FT. MIN. BUT NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS AND EGRESS.
5. STABILIZATION FABRIC: WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER: ALL SURFACE WATER FLOWING OF DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES IS PERMITTED.
7. WASHING: WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH USE OF SILT FENCES, ROCK BARRIERS OR OTHER APPROVED METHODS.
8. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

### CEP CONSTRUCTION EXIT PAD

N.T.S.



NOTE: CLEAN OUT MARKER TO BE LOCATED ADJACENT TO OUTLET CONTROL STRUCTURE

### TEMPORARY SEDIMENT BASIN CLEAN OUT MARKER

N.T.S.

**Tensar.** NORTH AMERICAN GREEN®  
5401 St. Wendel - Cynthiana Rd. PH: 800-772-2040  
Poseyville, IN 47633 www.tensarnagreen.com

**Disclaimer:**  
The information presented herein is general design information only. For specific applications, consult an independent professional for further design guidance.

Drawn on: 3-16-11

### TS COMMONLY USED PLANTS FOR TEMPORARY COVER

SPECIES	SEEDING RATE/AC PLS	SEEDING DATES (SOUTH)
WHEAT	90 LBS ALONE	9/1 - 11/30
RYEGRASS	30 LBS	9/1 - 11/30
WHITE CLOVER	5 LBS	9/1 - 11/30
CRIMSON CLOVER	25 LBS ALONE; 15 LBS MIX	9/1 - 11/30
HAIRY VETCH	30 LBS	9/1 - 11/30
BROWNTOP MILLET	40 LBS ALONE; 15 LBS MIX	4/1 - 8/30

### PS COMMONLY USED PLANTS FOR PERMANENT COVER WITH SEEDING

SPECIES	SEEDING RATE/AC PLS	SEEDING DATES (SOUTH)
COMMON BERMUDA	15 LBS ALONE; 10 LBS MIX	3/1 - 7/15; 9/1-11/30
BAHIA	40 LBS ALONE; 30 LBS MIX	3/1 - 7/15; 9/1-11/30
SAINT AUGUSTINE	SOD ONLY	3/1 - 7/15
CENTPEDE	4 LBS ALONE; 2.5 LBS MIX	3/1 - 7/15
CARPET GRASS	15 LBS ALONE; 10 LBS MIX	3/1 - 7/15
ZOYSIA GRASS	SOD ONLY	3/1 - 7/15
CREeping RED FESCUE	30 LBS ALONE; 22.5 LBS MIX	9/1-11/30
WEEPING LOVEGRASS	10 LBS ALONE; 5 LBS MIX	3/1 - 7/15

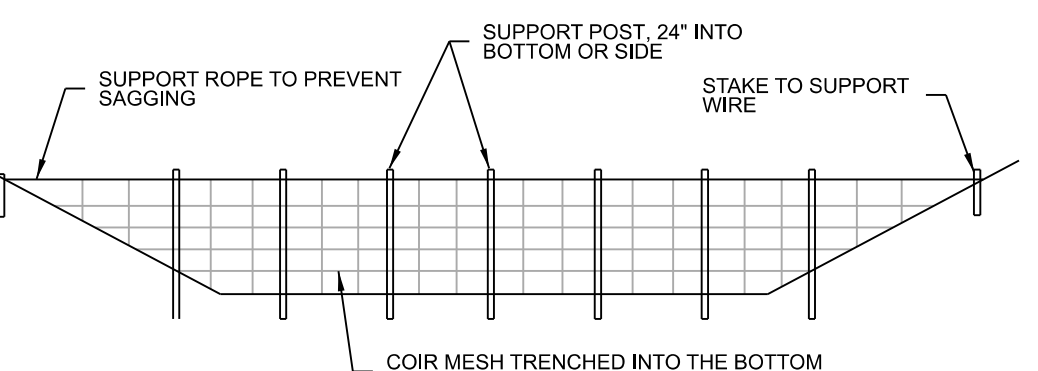
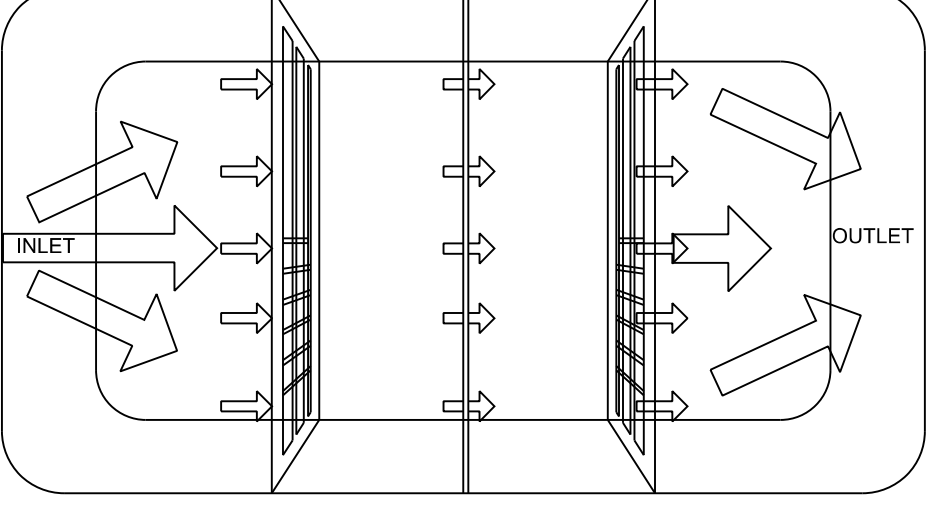
**DEFINITION:**  
ESTABLISHING TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS ON ALL DISTURBED OR DENUED AREAS THAT ARE NOT GOING TO BE GRADED WITHIN 15 DAYS.  
**PURPOSE:**  
-TO REDUCE EROSION, SEDIMENT, AND RUNOFF DAMAGES TO DOWNSTREAM RESOURCES.  
-TO IMPROVE WILDLIFE HABITAT.  
-TO IMPROVE AESTHETICS.  
-TO IMPROVE SAFETY AND PUBLIC ROAD RIGHTS-OF-WAY.  
-TO IMPROVE TILL AND ADD ORGANIC MATTER FOR PERMANENT PLANTINGS.

**CONDITIONS:**  
TEMPORARY VEGETATION IS REQUIRED ON ALL DISTURBED OR DENUED AREAS THAT ARE NOT GOING TO BE GRADED WITHIN 15 DAYS.  
THIS PRACTICE IS APPLICABLE ON AREAS SUBJECT TO EROSION FOR UP TO TWELVE MONTHS UNTIL ESTABLISHMENT OF FINISHED GRADE OR PERMANENT VEGETATIVE COVER. TEMPORARY VEGETATIVE MEASURES SHOULD BE COORDINATED WITH PERMANENT MEASURES TO ASSURE ECONOMICAL AND EFFECTIVE STABILIZATION.

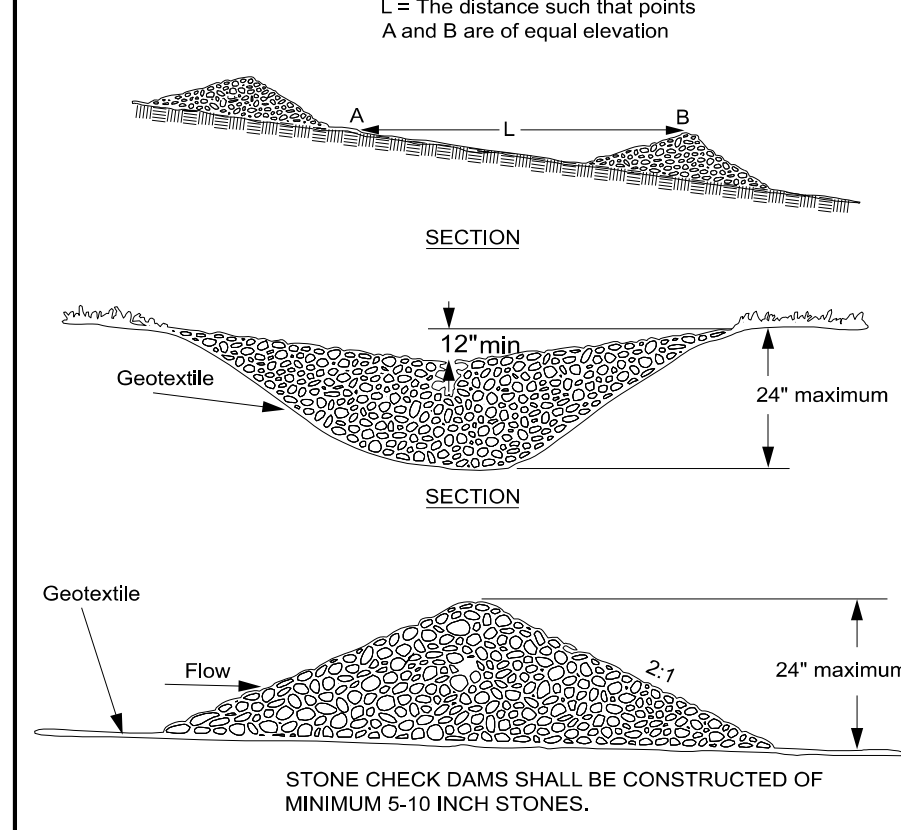
- SPECIFICATIONS:**
- A. GRADING AND SHAPING**
1. EXCESSIVE WATER RUN-OFF MUST BE CONTROLLED BY PLANNED AND INSTALLED EROSION CONTROL PRACTICES SUCH AS CLOSED DRAINS, DITCHES, DIKES, DIVERSIONS, SEDIMENT BASINS, AND OTHERS.
  2. NO SHAPING OR GRADING IS REQUIRED IF SLOPES CAN BE STABILIZED BY HAND-SEEDED VEGETATION OR IF HYDRAULIC SEEDING EQUIPMENT IS TO BE USED.
- B. SEEDBED PREPARATION**
1. WHEN A HYDRAULIC SEEDER IS USED, SEEDBED PREPARATION IS NOT REQUIRED UNLESS SOIL SURFACE IS COMPACTED.
  2. WHEN USING CONVENTIONAL OR HAND-SEEDING, SEEDBED PREPARATION IS NOT REQUIRED IF THE SOIL MATERIAL IS LOOSE AND HAS NOT BEEN SEALED BY RAINFALL OR COMPACTION.
  3. IF SOIL HAS BEEN SEALED BY RAINFALL, COMPACTION OR CONSISTS OF SMOOTH UNDISTURBED CUT SLOPES, THE SOIL SHALL BE PITTED, TRENCHED, OR OTHERWISE SCARIFIED A MINIMUM OF 6-INCHES DEEP TO PROVIDE A PLACE FOR SEED TO LODGE AND GERMINATE. BREAK UP LARGE CLODS AND LOOSEN COMPACTED HARD OR CRUSTED SOIL WITH APPROPRIATE TILLAGE EQUIPMENT. AVOID PREPARING THE SEEDBED UNDER EXCESSIVELY WET CONDITIONS.

### TS DISTURBED AREA STABILIZATION W/TEMPORARY SEEDING

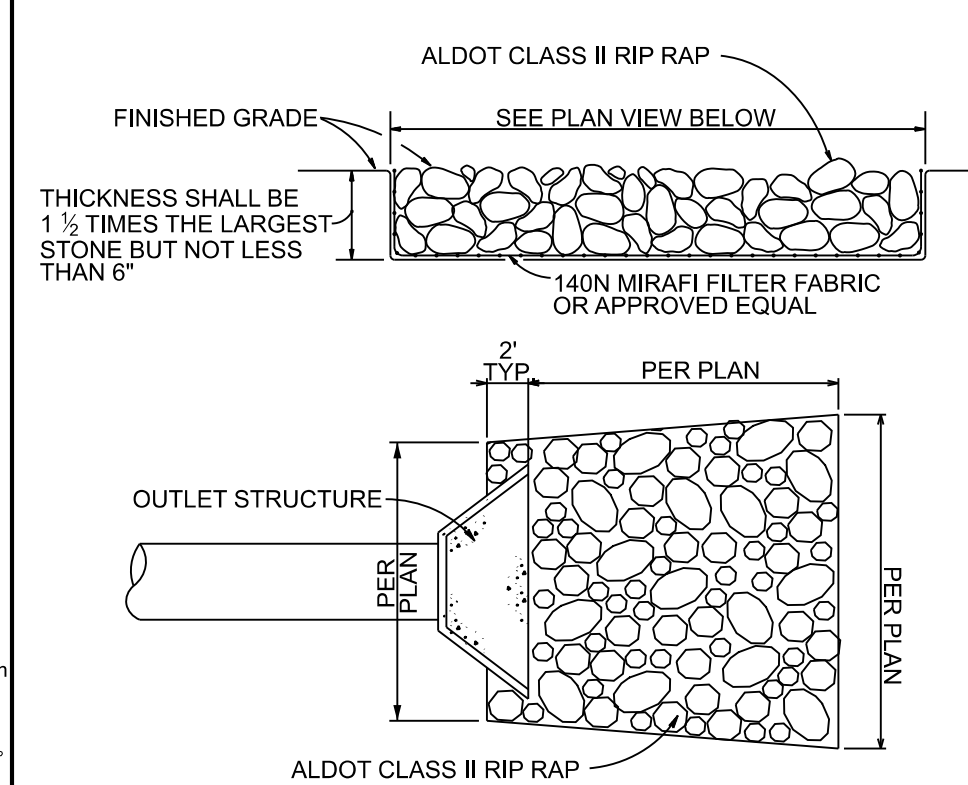
### PS DISTURBED AREA STABILIZATION W/ PERMANENT SEEDING



### TEMPORARY COIR BAFFLE DETAIL

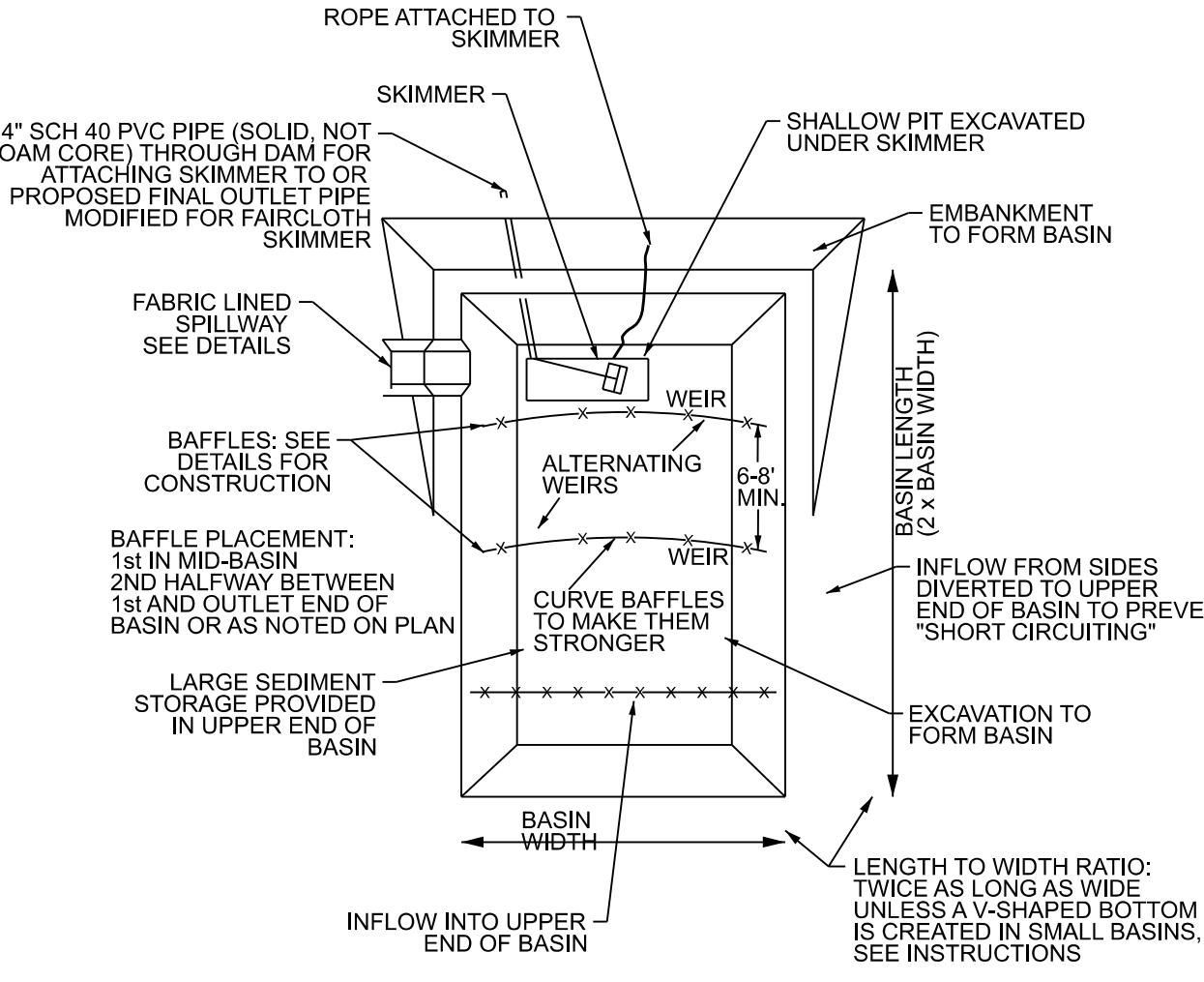


### CD RIP RAP CHECK DAM



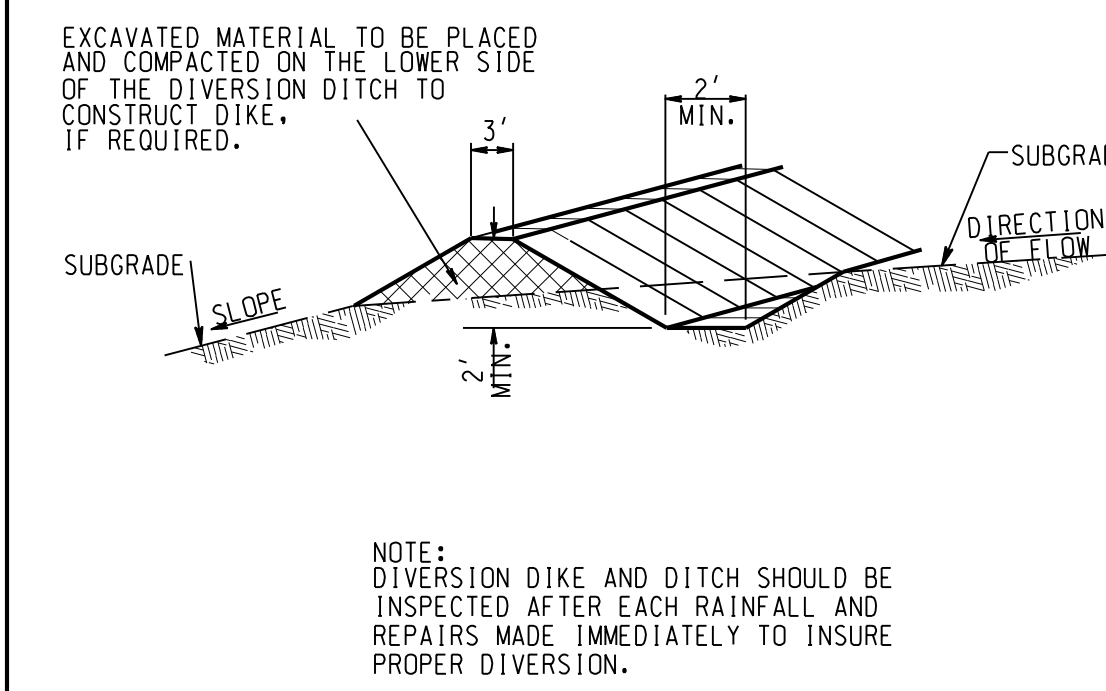
### OP RIPRAP END TREATMENT DETAIL

N.T.S.



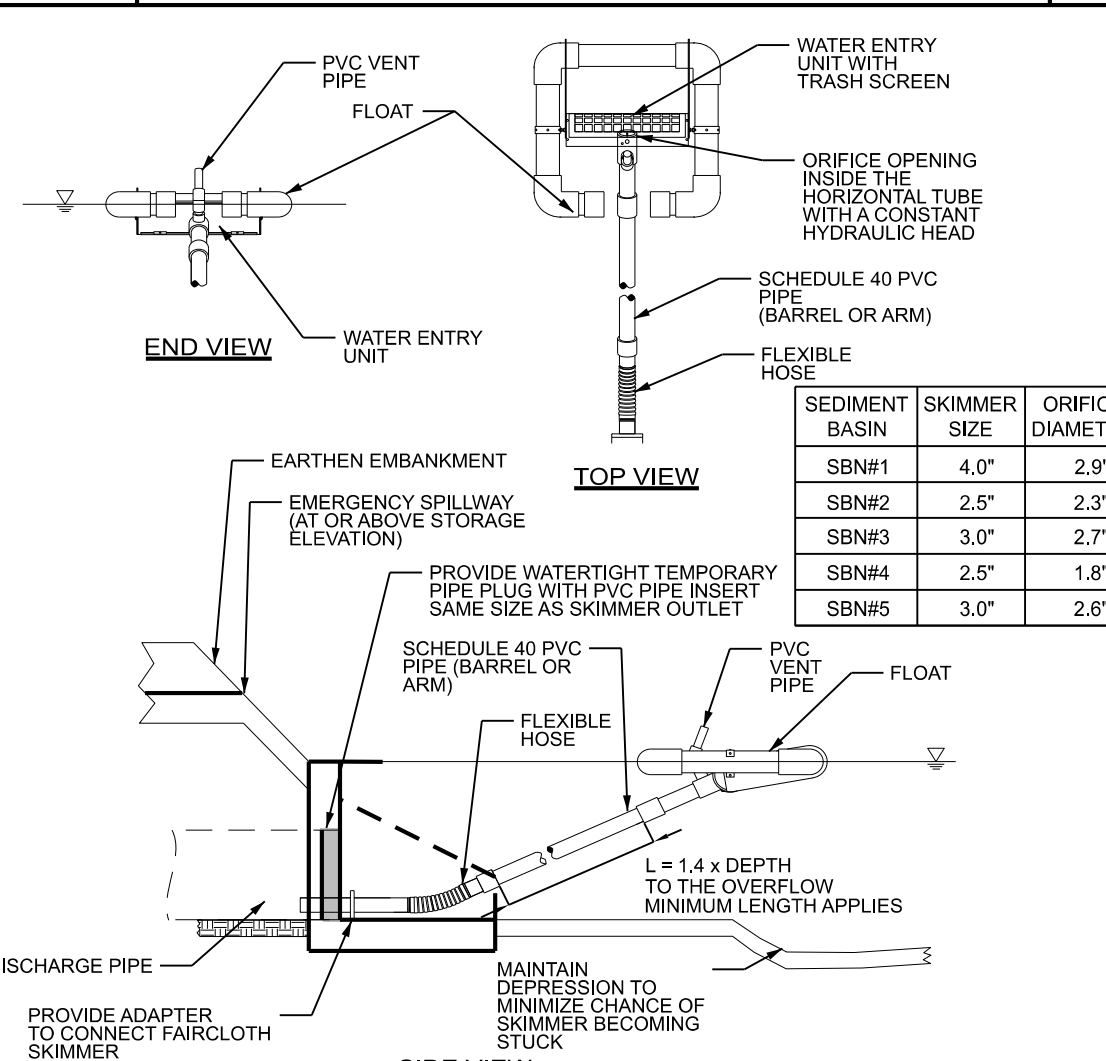
### PLAN VIEW OF SEDIMENT BASIN COMPONENTS

N.T.S.



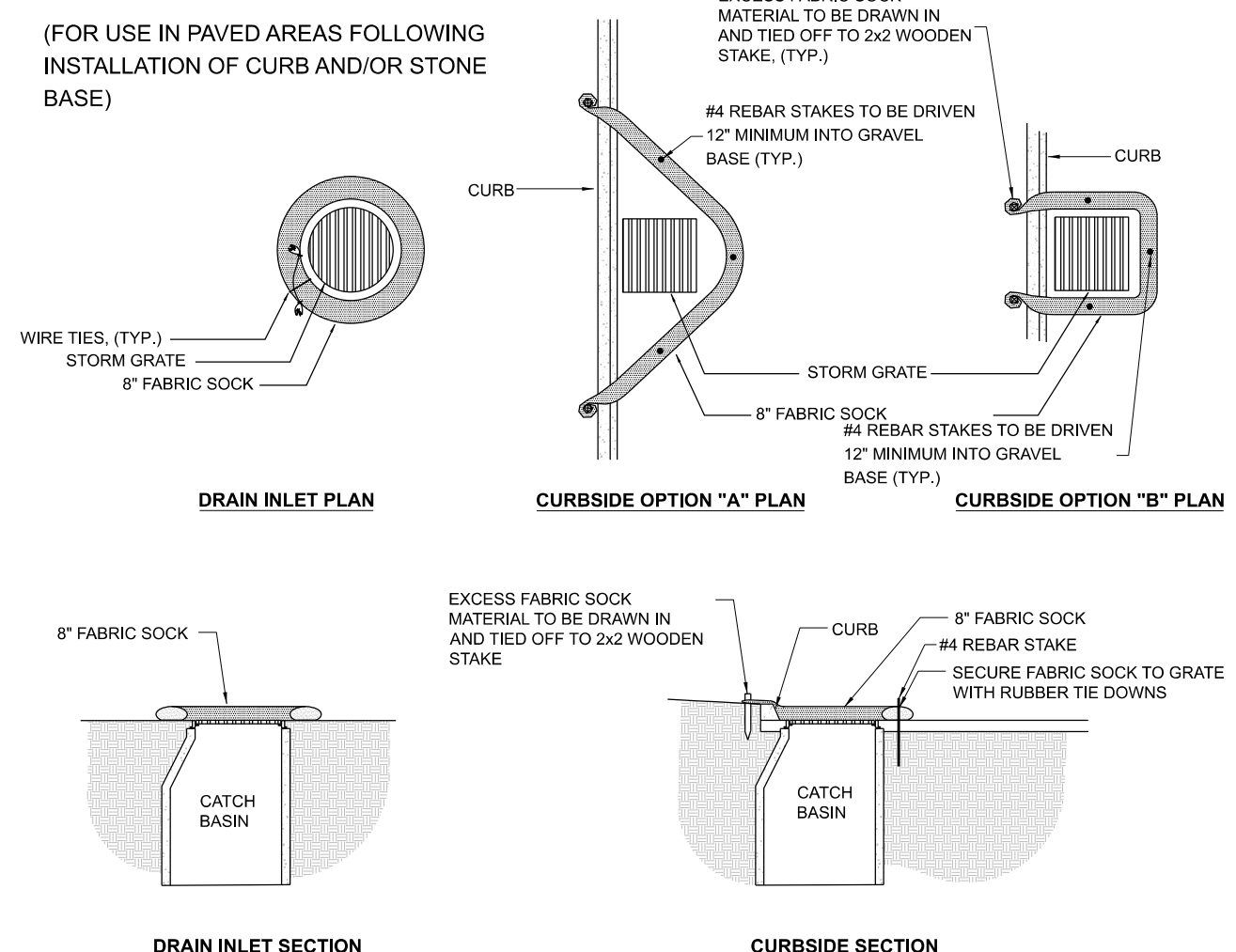
### DIVERSION DITCH/DIKE DETAIL

N.T.S.



### FS FAIRCLOTH SKIMMER WITHOUT ORIFICE PLATE

N.T.S.

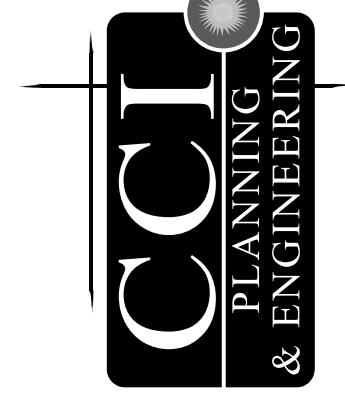


### WOOD CHIP & COMPOST INLET PROTECTION

N.T.S.



3528 Vann Road  
Suite 105  
Birmingham, AL 35235  
Phone: (205) 655-1991  
www.ccope.com



EROSION CONTROL DETAILS & SECTIONS  
PROJECT GENDREAU - A WAREHOUSE FACILITY  
HATTIESBURG, MISSISSIPPI  
FOR  
NORTHPOINT DEVELOPMENT

NO.	DESCRIPTION	BY	CHECKED	DATE	PROJECT	DATE	SCALE	STATUS
0	ISSUED FOR CITY OF HATTIESBURG LDP AND MDO LNOI	WDD	JTM	02/11/2022	SDW0001	02/11/2022	N.T.S.	

EC-3

**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 ESTABLISHMENT	ZONE OF ADAPTABILITY	NATIVE/INTRODUCED
<b>Common Bermuda</b>	15 lbs. alone 10 lbs. mixture	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
<b>Bahia</b>	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
<b>Fescue</b>	40 lbs. alone 30 lbs. mixture	9/1 - 11/30	6.0 - 7.0	600 lbs. 13-13-13	seed	North & Central	Native
<b>Saint Augustine</b>	--	3/1 - 7/15	6.0 - 7.0	600 lbs. 13-13-13	sod only	Central & South	Native
<b>Centipede</b>	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
<b>Carpet Grass</b>	15 lbs. alone 10 lbs. mixture	3/1 - 7/15	6.0 - 7.0	600 lbs. 13-13-13	seed or sod	All	Native
<b>Zoysia Grass</b>	--	3/1 - 7/15	6.0 - 7.0	600 lbs. 13-13-13	sod only	All	Introduced
<b>Creeping Red Fescue</b>	30 lbs. alone 22.5 lbs. mix	9/1 - 11/30	6.0 - 7.0	600 lbs. 13-13-13	seed	All	Native
<b>Weeping Lovegrass</b>	10 lbs. alone 5 lbs. mix	3/1 - 7/15	6.0 - 7.0	600 lbs. 13-13-13	seed	All	Introduced
<b>Sericea Lespedeza</b>	40 lbs.	3/1 - 7/15 9/1 - 11/30	6.0 - 7.0	400 lbs. 6-24-24	seed	All	Introduced
<b>*Wheat</b>	90 lbs. alone	9/1 - 11/30	6.0 - 7.0	600 lbs. 13-13-13	seed	All	Native
<b>*Ryegrass</b>	30 lbs.	9/1 - 11/30	6.0 - 7.0	600 lbs. 13-13-13	seed	All	Native
<b>*White Clover</b>	5 lbs.	9/1 - 11/30	6.0 - 7.0	400 lbs. 6-24-24	seed	All	Introduced
<b>*Crimson Clover</b>	15 lbs.	9/1 - 11/30	6.0 - 7.0	400 lbs. 6-24-24	seed	All	Introduced
<b>*Hairy Vetch</b>	30 lbs.	9/1 - 11/30	6.0 - 7.0	400 lbs. 6-24-24	seed	All	Introduced
<b>*Browntop Millet</b>	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 V - SUBMITTAL TO USCOE**





January 7, 2022

Via email: [CESAM-RD@sam.usace.army.mil](mailto:CESAM-RD@sam.usace.army.mil)

Department of the Army  
Mobile District, Corps of Engineers  
South Mississippi Branch  
P.O. Box 2288  
Mobile, Alabama 36628-0001

**Re: NorthPoint Development, LLC  
Project Gendreau  
Forrest County, Mississippi  
Nationwide Permit 39 Authorization Request**

To Whom It May Concern:

Headwaters, Inc. has been retained by NorthPoint Development, LLC, to serve as agent on their behalf in all matters related to the above referenced proposed Project Gendreau located in Forrest County, Mississippi. This letter, with supporting documentation, details the specifics of the planned project and contains the necessary information relative to the request for authorization for the project activities under a U.S. Army Corps of Engineers (USACE) Section 404 Nationwide Permit 39 or other pertinent authorizations for the unavoidable impacts to “other waters of the U.S.” associated with the proposed project.

On February 23, 2016, a preliminary jurisdictional determination (PJD) was issued on a tract that encompasses most of the current property boundaries (SAM-2015-00936-APS). In addition to the PJD, cultural resources and threatened and endangered species consultation was performed on the property. The previous PJD has since expired, and the property was assessed again with additional acreage included in the assessment.

On December 9, 2021, Headwaters completed a wetland and “other waters” assessment on the subject property to contain approximately 19 acres. The proposed project is located along the south side of J.M. Tatum Industrial Drive between South Hills drive and Sullivan Drive within the Forrest County Industrial Park. The project is situated in partial Section 35, Township 4 North, Range 13 West, Forrest County, Mississippi. The project is more specifically located at the following Global Positioning System (GPS) coordinates:

N31.265151° - W89.275223°

The exact physical location of the proposed project is depicted on the attached copies of the U.S.G.S. *Hattiesburg, Mississippi* Quadrangle Maps and the 2020 USDA National Agricultural Imagery Program (NAIP) color aerial photography covering the project area (**Attachment A**).

## PROJECT PURPOSE AND DESCRIPTION

The purpose of the proposed project is the construction of a regional warehouse and distribution center for Pepsi/Frito Lay within the existing Forrest County Industrial Park. The industrial development will serve as the regional distribution hub and will be responsible for the warehousing and delivery of Pepsi/Frito Lay products to area merchants, as well as housing offices for distribution and logistics personnel. Project plans are depicted in the exhibits in [Attachment A](#).

The proposed project is centered around a proposed  $\pm 99,000$  square foot warehouse and distribution center. The proposed structure will be constructed in the southeast portion of the subject property. As proposed, the structure will facilitate  $\pm$  twenty-eight (28) semi-truck delivery and shipping bays, as well as corporate office space for distribution and logistics personnel. There will also be a  $\pm 3,000$  square foot truck maintenance garage constructed in the north central portions of the subject property.

Accompanying the central distribution center will be the construction of a large, multifaceted asphalt parking area with three (3) entryways to adjacent public roads. Two (2) of the entrances will stem from J.M. Tatum Industrial Park Drive along the north property boundary, while one (1) will extend from Sullivan Drive in the southeast corner of the property. The large parking area will be sectioned off into four (4) main areas. Two (2) of these areas will be located along western boundary of the subject property and will facilitate approximately seventy (70) 12' wide x 65' long semi-truck parking spaces. The third parking area will be situated directly north and west of the proposed facility and will include forty-eight (48) additional semi-truck parking spaces and the aforementioned shipping bays. The remain parking area will be located east of the proposed facility and will include ninety-nine (99) 9' wide x 18' long vehicle parking spaces. As depicted on the site plans, a network of roads will also be constructed between the facility and parking areas and the three (3) entrances. Due to the area of disturbance and coverage of impervious surfaces, four (4) stormwater detention areas totaling  $\pm 64,000$  square feet will be constructed along the downgradient side of the parking areas.

Due to the underlying topography of the site, earthwork will be required for the construction of the facility and parking areas. Approximately 74,000 cubic yards of soil will be cut, while approximately 58,000 cubic yards will be filled, resulting in a net removal of approximately 13,200 cubic yards of soil. The grading and fill during site preparations will result in 0.22 acres of clearing and fill to PFO-1, 0.04 acres of clearing and fill to PSS-1, and 0.05 acres of fill to PEM-1. Additionally, INT-1 will be impacted by the construction of a culvert at the proposed road crossing and will result in approximately 105 linear feet (0.01 acres) of impacts. Total anticipated impacts to jurisdictional areas are 0.32-acre and impacts to potentially non-jurisdictional areas total 0.05-acre.

Efforts will be in place to minimize soil disturbance. Remaining trees and vegetation will be harvested by standard silvicultural practices (logging) and removed from the site. Upon completion of the construction activities, all exposed soils will be re-vegetated and stabilized to ensure that no secondary adverse impacts occur within the jurisdictional wetland areas or the adjacent receiving streams within the project area. The proposed site layout/design is included within [Attachment A](#).

## WETLANDS

As part of a site review, Headwaters completed a wetland and “other waters” assessment covering the planned project site. The initial phase of this project included the assimilation of all available information related to the property that would help establish a historical perspective of the property and highlight the physical attributes of the property, the primary drainage patterns, and the physical location of the suspected wetlands and/or stream crossings located within the limits of the subject property. An integral component of this phase was the review of the U.S.G.S. *Hattiesburg, Mississippi* Quadrangle Map, USDA NAIP 2020 color aerial imagery, and the MDEQ/USGS East Camp Shelby 2016 LiDAR Elevation data. A copy of the wetland and “other waters” assessment report can be found within [Attachment E](#).

The following is a breakdown of the habitat types found within the project area:

Habitat	Length (LF)	Area (AC)
Intermittent Tributary (Potentially Jurisdictional)	684.46	0.08
Emergent Wetlands (Potentially Non-Jurisdictional/Isolated)	-	0.42
Forested Wetlands (Potentially Jurisdictional)	-	1.28
Scrub Shrub Wetlands (Potentially Jurisdictional)	-	0.30
Uplands (Non-Wetland)	-	16.92
<b>TOTALS</b>	<b>684.46</b>	<b>±19</b>

As assessed, it appears that the emergent wetland on the east property line (PEM-1) does not have a direct hydrologic connect to any other potentially jurisdictional wetlands or “other waters of the U.S.” The area is an isolated depression that is has a slight berm on the downgradient side, which is preventing water from naturally draining downhill. Also, the area contained significant rutting from forestry machinery used in the recent clearing practices, that is impeding natural surface hydrology. Furthermore, this feature is not connected to the floodplain of any stream, located down gradient. Due to these factors, we believe this feature to be considered an isolated and/or non-jurisdictional feature.

As such, the following unavoidable adverse impacts to jurisdictional wetlands and “other waters of the U.S.” are anticipated as a part of the planned development activities:

Habitat Type	Permanent Impacts	Avoided	Nature of Activity
Forested Wetland (PFO-1)	0.22 ac	1.06 ac	Clearing, grading, and/or filling for construction of parking areas and roads
Scrub Shrub Wetland (PSS-1)	0.04 ac	0.26 ac	Clearing, grading, and/or filling for construction of parking areas and roads
Intermittent Stream (INT-1)	105 lf/0.01 ac	579.46 lf/0.07 ac	Installation of approximately 105 feet of culvert within stream channel @ proposed road crossing



## THREATENED AND ENDANGERED SPECIES

Potential impacts to threatened and endangered species were assessed as a part of the initial project planning. Species accounts and habitat requirements were collected and reviewed from the U.S Fish and Wildlife Service (USFWS). According to county lists provided by the U.S. Fish and Wildlife Service (USFWS), the Black Pinesnake (*Pituophis melanoleucus lodingi*), Gopher tortoise (*Gopherus polyphemus*), Yellow-blotched Map Turtle (*Graptemys flavimaculata*), Dusky Gopher Frog (*Rana sevosia*), Gulf Sturgeon (*Acipenser oxyrinchus desotoi*), Pearl Darter (*Percina aurora*), Wood stork (*Mycteria Americana*), and Louisiana Quillwort (*Isoetes louisianensis*) are listed as threatened and/or endangered species in for the subject property. It should be mentioned that, according to the USFWS, no proposed or critical habitat exists on the proposed project location.

The USFWS – Mississippi Ecological Services Field Office online project review (ECOS-IPaC) was completed as a preliminary review of the project site regarding listed species. Regarding the Black Pinesnake, although the species is listed as occurring within Forrest County, the nearest recorded critical habitat is listed as being in the Desoto National Forest in southern Forrest County. Given that no critical habitat was encountered on the site, and that no evidence of the species was noted during the site visit, impacts to the Black Pinesnake are not anticipated by the completion of this project.

Regarding the Gopher Tortoise, no critical habitat has been designated for this species. No evidence of the Gopher Tortoise or subsequent burrows were observed during the site visit. Given this, impacts to the Gopher Tortoise are not anticipated by the completion of this project.

According to the USFWS, “the Yellow-blotched Map Turtle requires rivers that are large enough to have an open canopy allowing for several hours of sunshine daily”. Given that no suitable rivers within the subject property, there will be no impacts to the Yellow-blotched map turtle by the completion of this project.

According to the USFWS, the nearest critical habitats listed for the Dusky Gopher Frog occur within the Desoto National Forest in southern Forrest County. Given that no critical habitat was encountered at the site, and that no evidence of the species was noted during the site visit, impacts to the Dusky Gopher Frog are not anticipated by the completion of this project.

The nearest critical habitat listed for the Gulf Sturgeon is the Leaf River, which is located several miles east of the project area. Given that no suitable habitat is found within the project area, no impacts to the Gulf Sturgeon will occur by the completion of this project.

According to the USFWS, the Pearl Darter is known to occur within the Pascagoula, Chickasawhay, Leaf, Chunky and Bouie Rivers, and Okatoma and Black Creeks. Given that none of these water bodies are found within the subject property, no impacts to the Pearl Darter will occur by the completion of this project.

The USFWS states that the primary Wood Stork nesting habitat is cypress swamps and nearly permanently flooded areas. The project area does not contain suitable habitat for the Wood

Stork, and as a result, impacts to the Wood Stork are not anticipated by the completion of this project.

Regarding the Louisiana Quillwort, no critical habitat has been designated for this species. No evidence of the Louisiana Quillwort was observed during the site visit. Given this, impacts to the Louisiana Quillwort are not anticipated by the completion of this project. The USFWS online review is included within [Attachment D](#).

## **CULTURAL RESOURCES**

All Phases Archaeology (APA) was contracted to complete a literature review to identify previously recorded historic and prehistoric properties within a one (1) mile radius of the property ownership boundaries. In a letter dated December 16, 2021, APA revealed that there were sixteen (16) previously recorded archaeological sites located within a mile of the subject property identified by the Mississippi Department of Archives and History (MDAH) Mississippi State Archaeological Site File (MSASF). None of these previously recorded sites occurred within the subject property boundaries. Research of the MSASF also revealed twelve (12) previously conducted cultural resource surveys within one mile of the subject property, with one (1) of the studies covering the extent of the subject property (#15-0233).

Survey #15-0233 was conducted in 2015 and covered the extent of the subject property. This survey revealed the presence of one (1) archaeological site (22Fo1706), which was also noted by Headwaters at the time of the field visit. This site is a 20<sup>th</sup> century light-density historic scatter that includes the remains of a razed structure. The site was recommended as ineligible for the NRHP. An additional site, 22Fo550, was noted on prior cultural resources surveys, but evidence of the site during survey #15-0233 was not observed. 22Fo550 was a site of unknown prehistoric content and was recommended ineligible for the NRHP.

Additionally, the MDAH historic property files revealed ten (10) historic properties within a mile of the subject property. One (1) of these properties (#035-HAT-5009-NR-X) was listed in the National Register of Historic Places (NRHP) but was burned in 2010 and is no longer extant. A copy of the correspondence is provided in [Attachment D](#).

## **BEST MANAGEMENT PRACTICES**

Best Management Practices (BMP's) will be implemented and maintained through the construction sequence to ensure that no secondary adverse impacts to adjacent habitats occur. BMP's will be maintained until final stabilization is achieved ensuring storm water compliance. All applicable construction storm water permits in accordance with the Mississippi Department of Environmental Quality (MDEQ) and Forrest County shall be obtained by the applicant prior to site construction activities.

## **COMPENSATORY WETLAND MITIGATION**

As discussed, it is anticipated that approximately 0.05 acre of emergent wetland (non-jurisdictional), 0.04 acre of scrub shrub wetland (jurisdictional), 0.27 acre of forested wetland (jurisdictional), and 105 linear feet/0.01 acre of intermittent channel (jurisdictional) will be

permanently impacted through the construction of the proposed project. The anticipated impacts would be considered as unavoidable permanent impacts associated with the development of the site. Should the USACE concur, the potentially non-jurisdictional features would not be considered as "waters of the U.S.", therefore compensatory wetland mitigation is not proposed for these areas (PEM-1).

Regarding the permanent impacts to the jurisdictional areas (PFO-1, PSS-1, INT-1), discharge of fill material within these areas will require a Department of the Army Section 404 permit prior to beginning work. Given the project's proposed impacts will be greater than 1/10-acre but less than 1/2-acre, compensatory wetland and stream mitigation will be proposed for these unavoidable impacts. The applicant proposes to purchase 0.18 wetland credits and 162.75 stream credits from an approved mitigation bank servicing the project area (Bogue Homo Mitigation Bank). The applicant requests that USACE concur with this compensatory mitigation proposal in writing, or if any changes are needed that the applicant and consultant be advised if needed. A copy of the wetland and stream credit calculations is included within **Attachment C**.

## CONCLUSION

At this time, we respectfully request your agency's review of the submitted information covering the proposed project activities. We also respectfully request your agency's consideration of the authorization for the anticipated wetland impacts under a Nationwide Permit 39 or other pertinent Section 404 Wetland Permit authorization.

For mailing purposes, the applicant's address is as follows:

Mr. Robbie Nguyen, Development Manager  
NorthPoint Development, LLC  
4805 Montgomery Road, Suite 310  
Cincinnati, OH 45212  
(513) 578-2907  
rnguyen@northpointkc.com

As always, we appreciate your assistance in this matter. If you have any questions or need any additional information, please do not hesitate to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Little", with a stylized flourish extending to the right.

Joel Little  
Headwaters, Inc.

cc: Shea McNease, Shows, Dearman & Waits, Inc.  
Robbie Nguyen, NorthPoint Development, LLC



