MAJOR MODIFICATION FORM
FOR LARGE CONSTRUCTION GENERAL PERMIT
Coverage No. MSR10 8 1 7 7 County Yazoo

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

INSTRUCTIONS

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

☐ **SWPPP details have been developed and are ready for MDEQ review for subsequent phases of an existing, covered project.**

☑ **"Footprint" identified in the original LCNOI is proposed to be enlarged.**

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

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

COVERAGE RECIPIENT INFORMATION

COVERAGE RECIPIENT CONTACT NAME: Rusty Shaw TEL # (972) 673-2777

COMPANY NAME: Denbury Gulf Coast Pipeline LLC

STREET OR P.O. BOX: 5320 Legacy Drive

CITY: Plano STATE: TX ZIP: 75024 E-MAIL: rusty.shaw@denbury.com

PROJECT INFORMATION

PROJECT NAME: CO2 Pipeline Repair

CITY: Satartia

ADDITIONAL ACREAGE TO BE DISTURBED: +/-2.0 TOTAL PROJECT ACREAGE: +/-8.0

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.

Rusty Shaw
Signature (must be signed by coverage recipient)

7/21/20
Date

Rusty Shaw
Printed Name

Environmental Compliance Manager
Title

Please submit this form to:

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

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

PART I

LARGE CONSTRUCTION STORM WATER GENERAL NPDES PERMIT

FOR

Denbury Resources, Inc.
Tinsley CO_2 Pipeline Repair
Yazoo County, Mississippi

July 2020

PREPARED BY:

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

HEADWATERS INC.
NATURAL RESOURCES CONSULTING

TABLE OF CONTENTS

I. INTRODUCTION

The purpose of the Storm Water Pollution Prevention Plan (SWPPP) is to provide a site-specific description of the best management practices to prevent contamination of the site storm water flows from potential pollutants associated with construction activities. The SWPPP has been prepared for Denbury Resources, Inc. (Denbury) 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 project development plans. The plan also outlines implementation, inspection, and maintenance requirements. The erosion and sediment control practices should be monitored, and the plan should be revised if storm water compliance is not achieved.

II. SITE ASSESSMENT

A. **Location**: The site is an existing CO_2 transmission line near the Town of Satartia in Yazoo County, Mississippi. The following GPS coordinates can be used to locate the project area:

Northern Terminus: N31.980653° - W89.813866°
Southern Terminus: N31.881441° - W89.759028°

B. **Description of Work**: The project will involve the repair of the existing transmission line. Roughly 8 acres of right-of-way (ROW), staging area, and access roads will be disturbed throughout the entire project. The existing ROW is 125 feet wide. In addition, 125 feet of intermittent stream has been identified within the ROW. Caution will be utilized in these areas to avoid unnecessary impacts.

C. **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, other floating materials, and eroded soils.

D. **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.

E. **Drainage Patterns**: Most of the rainwater that falls on areas disturbed by construction activities will sheet flow off the ROW.

F. **Receiving Waters**: An unnamed tributary to the Yazoo River will be the main receiving waters for this project. Extensive measures will be taken to prevent any silt and sediment contamination from entering these receiving streams. By using the selected BMPs, this will ensure that discharges from the site will not cause or contribute to exceedances of the water quality standards in the receiving stream or the Yazoo River TMDL for sediments in accordance with the Large Construction General Permit.

G. **Wetlands:** The entire property has been delineated and no work will occur within potential wetlands or other waters. Extensive measures will be taken to prevent any silt and sediment contamination from entering these areas.

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 wetlands, stream or water body. Appropriately chosen and installed erosion and sediment control BMPs will be used to prevent sediment from leaving the site or entering adjacent wetlands or other waters. 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 completed project is approved by Denbury personnel and a Notice of Termination has been issued by MDEQ. The site plan found in Appendix II will detail where each BMP will be used. Additional control measures could include but are not limited to the use of secured sediment/silt fencing, wooden or vinyl barriers and/or seeding or sodding of exposed or disturbed areas.

1. Structural Practices

- Construction Entrance/Exit (Rock) (Temporary Practice) – There will be two construction entrances as shown on the plans. Aggregate should be at least six (6) inches thick and 50 feet long using DOT#1 coarse aggregate and geotextile fabric shall be used as a base layer for the rock. The

entrances will be inspected weekly and periodic top dressing with new gravel may be necessary when it becomes clogged with dirt and/or debris to prevent the tracking of mud and dirt onto the roadway. In addition, dirt and debris that accumulates on the roadway must be removed immediately.

- 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, the wetland areas and water crossings as needed and at any other locations deemed necessary once construction begins. Silt fence will be maintained, and the sediment will be removed when deposits reach one-third to one-half the fence height. Wire-backed silt fence will be utilized along steep slopes, at the base of slopes, and as otherwise determined to be needed. The General Permit defines steep slopes as slopes or grades steeper than 3:1 (33% grade). On any slopes less than 3:1 and in general disturbed areas, non-wire backed silt fence may be utilized. All silt fence must be trenched into the ground a minimum of six (6) inches.
- Hay Wattles (Temporary Practice) – Wattles will be installed as shown on the site-plan. They will be placed between the area to be disturbed, the wetland areas and water crossings as needed and at any other locations deemed necessary once construction begins. Sediment will be removed when it reaches one half the height of the barrier. Straw wattle must be at minimum eighteen (18) inches in diameter.
- Diversion Berms (Temporary Practice) – Berms will be utilized as needed on all steep slopes. The General Permit defines steep slopes as slopes or grades steeper than 3:1 (33% grade). Water should be diverted to vegetated areas along the ROW.
- Matting- In areas of the ROW where standard BMP's are not sufficient (along slopes, banks and crossing water), the installation of matting should be considered or may be required in order to prevent runoff. Once matting is installed contractors must use the mats to traverse the ROW.
- Fueling and Vehicle Maintenance Locations – Fueling and vehicle maintenance areas shall use BMPs 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.

2. Vegetative Practices

- Topsoil – Topsoil will be stockpiled and used in areas that will be revegetated. When final grade is reached, it should be distributed to a minimum depth of 2 inches on 3:1 slopes and 4 inches on flatter slopes.

- Temporary Seeding (Temporary Practice) – When an area remains undisturbed for fourteen (14) days or more, the appropriate temporary or permanent vegetative practices shall be implemented immediately.
- Mulching (Temporary) – Mulch will be used whenever possible to aid in slope stabilization to hold moisture, dampen temperature extremes and retard erosion on steep slopes until temporary or permanent seeding can be implemented.
- 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.
- Heavy equipment used in areas to be re-vegetated should be avoided. If compaction cannot be avoided, the top 4 inches of soil bed should be tilled before revegetation.

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

C. **Operation and Maintenance**: The best management practices must be properly installed and maintained as designed and inspected weekly. 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.

D. **Record Keeping:** Records shall be retained for three years of all maintenance activities, spills, and inspections, including a description of the quality and quantity of storm water.

E. **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. All employees joining the project after the initial meeting must receive the environmental training and sign the roster.

F. **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:

1. designate areas for equipment maintenance and repair
2. provide waste receptacles at convenient locations and provide regular collection of waste
3. provide protected storage areas for chemicals, paints, solvents, fertilizers, and other potentially toxic materials
4. provide adequately maintained sanitary facilities
5. designate an area for concrete truck wash out
6. streets will be swept as needed to remove sediment or other debris that has been tracked from construction site
7. 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. An updated construction sequence will be submitted to MDEQ 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. Install the construction entrances as shown on the plans.
4. Install all erosion and sediment controls as indicated on the site plan.
5. Begin site work.
6. 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.
7. As site is cleared, maintain BMPs as needed to ensure minimal erosion and sedimentation problems.
8. Perform any temporary seeding as needed and instructed throughout the construction process.
9. Final grading, seeding, sodding, mulching, and fertilizing.
10. Ensure final stabilization is achieved within the project site.
11. 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. divert upslope water around area before major site grading
3. do not disturb an area until it is necessary
4. time construction activities to limit impact from seasonal weather
5. cover or stabilize disturbed area as soon as possible
6. do not remove temporary controls until after site stabilization
7. The permittee shall limit clearing, excavation, and the placement of fill materials to areas essential to the project. The remainder of the property shall be left in its natural state.

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

VI. INSPECTIONS AND REPORTING

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

1. At least weekly for a minimum of four inspections per month.

2. After a rainfall event that produces a discharge and 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.

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

As previously stated, all records, reports, and information resulting from

activities required by this plan and the issued permit shall be retained for at least three years from the date of the CNOI, inspection, or report.

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

VII. REVISIONS

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

- Inadequacies revealed by routine inspections.
- Changes in identified sources, non-storm water discharges, or non-storm water solid wastes.
- MDEQ 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.
- Any additions, removals, or modifications to construction entrances as shown on the site plans.
- All revisions to the SWPPP must be approved by Denbury.

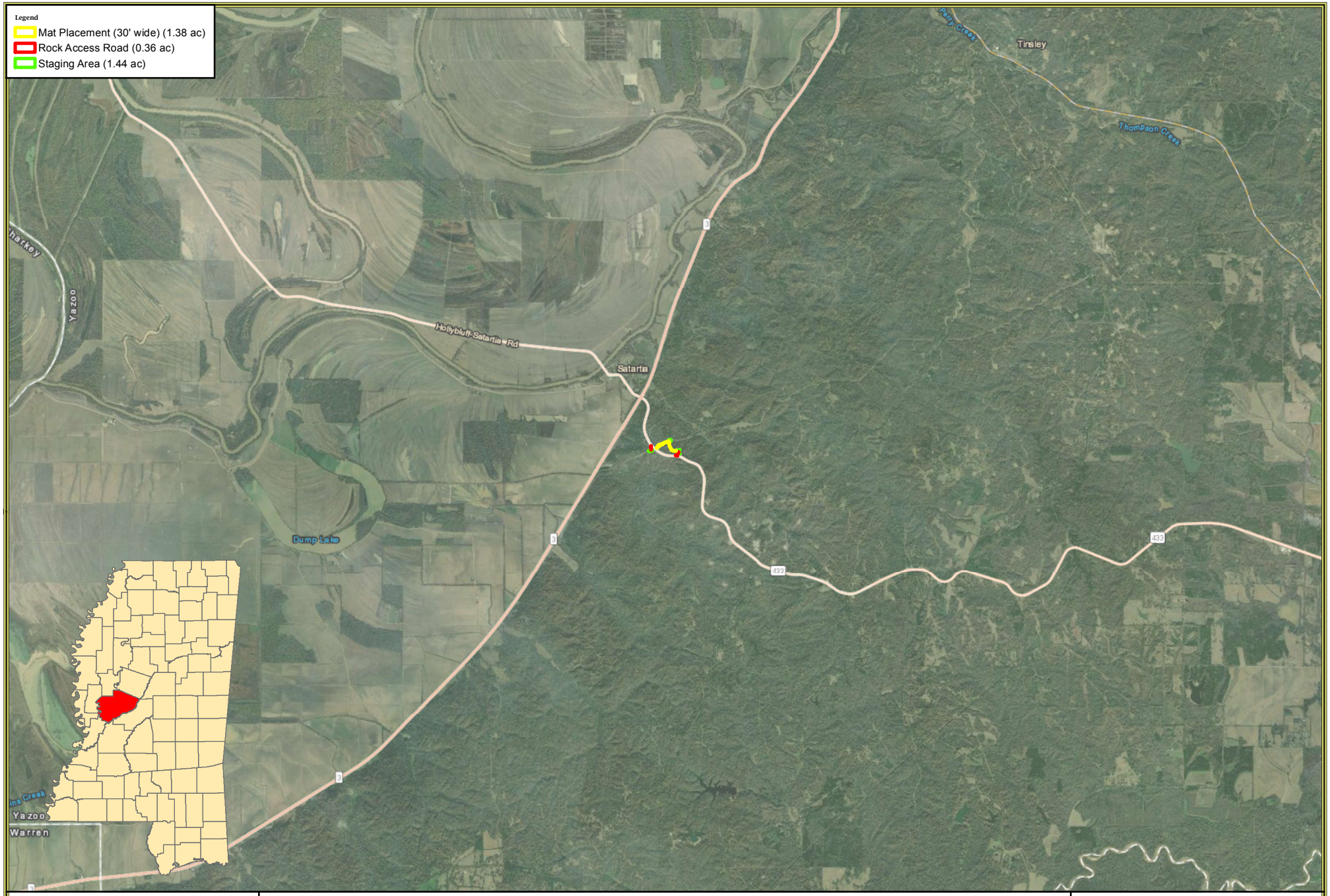
A plan revision will be completed within 30 days of the date if determined that a revision is warranted. If the modification is in response to a request by the Office of Pollution Control (OPC), the permittee must submit to the OPC certification that the requested changes have been made.

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. Failure to submit an RFT form is a violation of permit conditions.

IX. APPENDIX I – LOCATION MAPS



HEADWATERS INC.
NATURAL RESOURCES CONSULTING
WWW.HEADWATERS-INC.COM

Date Created: 7/22/2020

Created by: JDL

Denbury
Tinsley C02 Pipeline Incident Location

Yazoo County, Mississippi

General Location Map

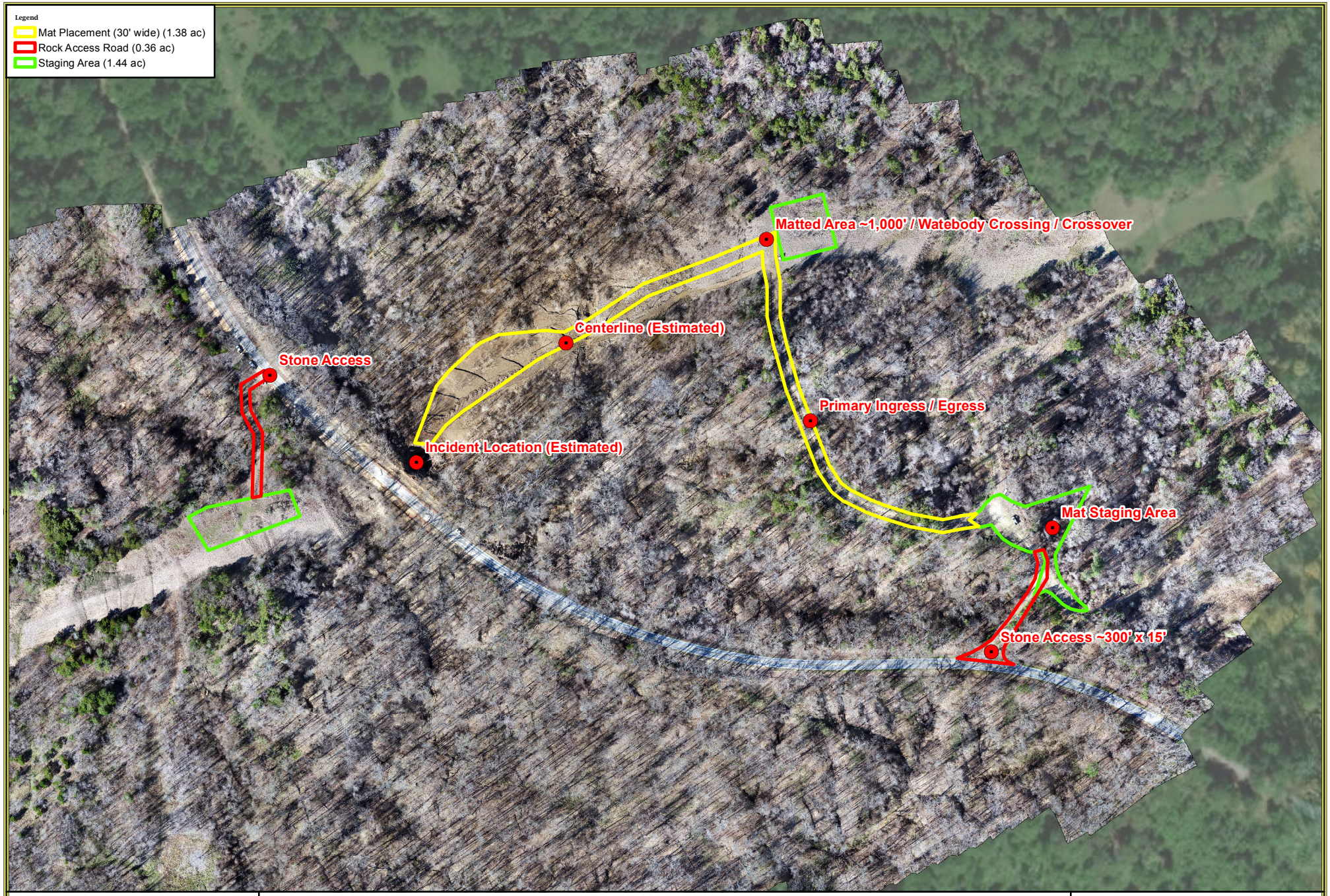
0 5,000 10,000 Feet

1:100,000

N

NAD 1983 StatePlane Mississippi West FIPS 2302 Feet

ESRI World Imagery Basemap



HEADWATERS INC.
NATURAL RESOURCES CONSULTING
WWW.HEADWATERS-INC.COM

Date Created: 7/22/2020

Created by: JDL

Denbury
Tinsley C02 Pipeline Incident Location

Yazoo County, Mississippi

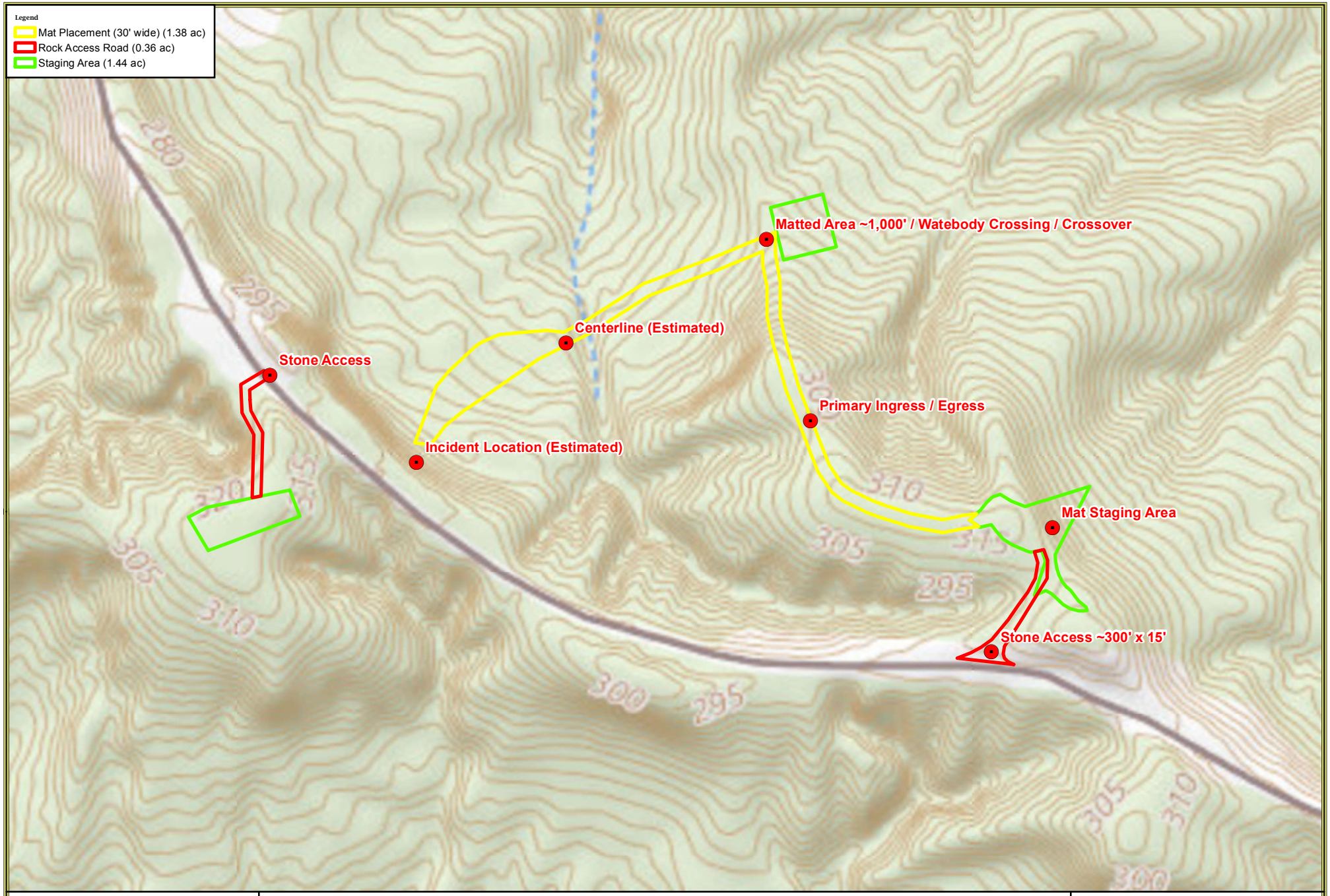
Site Location Map

0 175 350 Feet

1:3,500

N

NAD 1983 StatePlane Mississippi West FIPS 2302 Feet



HEADWATERS INC.
NATURAL RESOURCES CONSULTING
WWW.HEADWATERS-INC.COM

Date Created: 7/22/2020

Created by: JDL

Denbury
Tinsley C02 Pipeline Incident Location

Yazoo County, Mississippi

Site Location Map

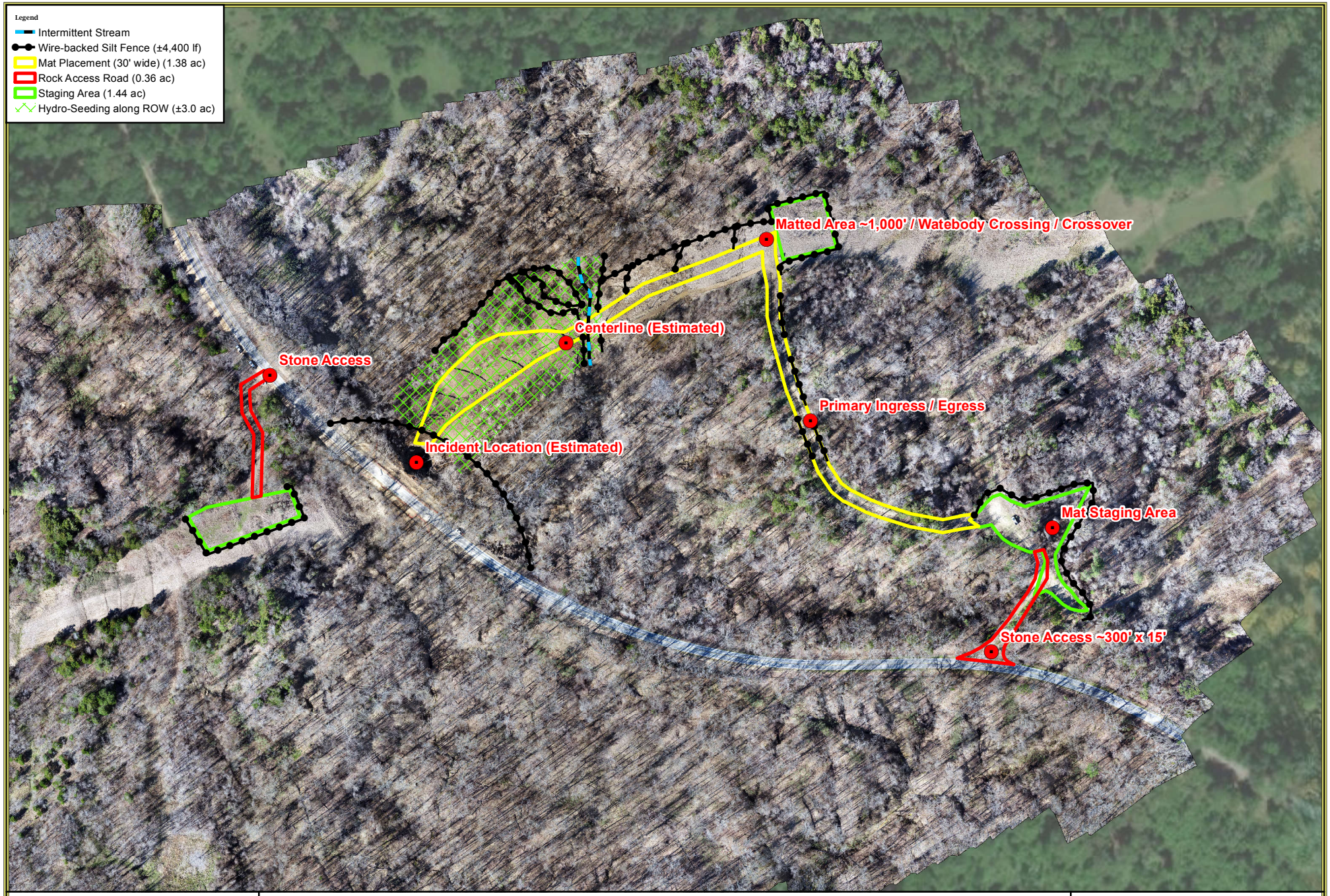
0 175 350 Feet

1:3,500

N

NAD 1983 StatePlane Mississippi West FIPS 2302 Feet

X. APPENDIX II – STORM WATER MANAGEMENT PLANS



HEADWATERS INC.
NATURAL RESOURCES CONSULTING
WWW.HEADWATERS-INC.COM

Date Created: 7/20/2020

Created by: JDL

Denbury
Tinsley C02 Pipeline Incident Location

Yazoo County, Mississippi

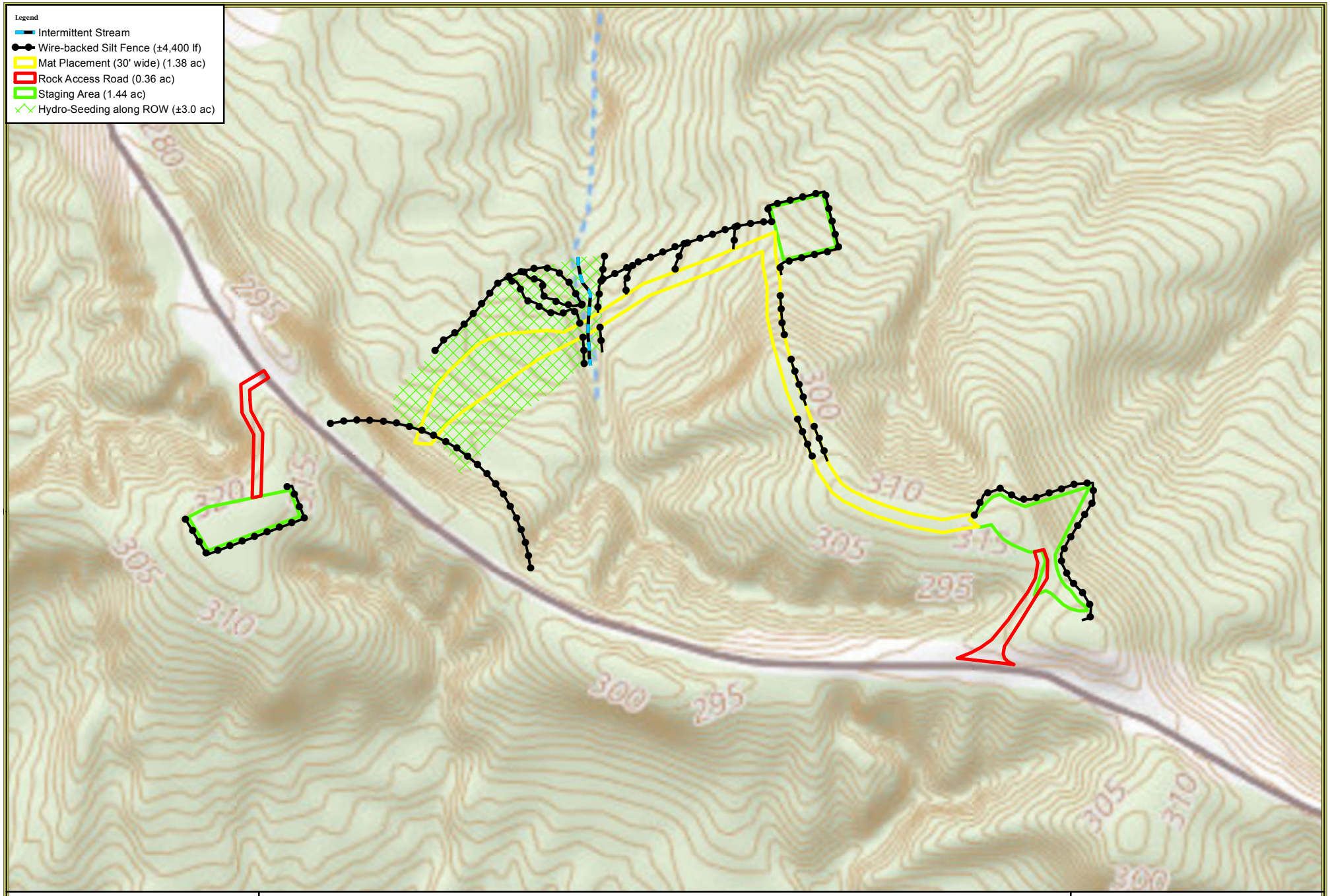
BMP Location Map

0 175 350 Feet

1:3,500

N

NAD 1983 StatePlane Mississippi West FIPS 2302 Feet



HEADWATERS INC.
NATURAL RESOURCES CONSULTING
WWW.HEADWATERS-INC.COM

Date Created: 7/22/2020

Created by: JDL

Denbury
Tinsley C02 Pipeline Incident Location

Yazoo County, Mississippi

BMP Location Map

0 175 350 Feet

1:3,500

N

NAD 1983 StatePlane Mississippi West FIPS 2302 Feet