DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT
4155 CLAY STREET
VICKSBURG, MS 39183-3435

September 20, 2024

Engineering and Construction Division
Hydraulics Branch

Ms. Krystal Rudolph
Environmental Permits Branch
Office of Pollution Control
P.O. Box 2261
Jackson, Mississippi 39225

Dear Ms. Rudolph:

Enclosed is a Large Construction Notice of Intent (LCNOI) requesting NPDES Storm Water Discharge Permit coverage for the maintenance efforts associated with the 1984 Demonstration Erosion Control (DEC) Project. (Yalobusha River Channel Maintenance) (enclosure 1). The LCNOI specifically addresses the maintenance activities of the Yalobusha River Channel Maintenance associated with the above mentioned project which is located in Calhoun County. A copy of the Storm Water Pollution Prevention Plan (enclosure 2), Order of work (enclosure 3) and a site map (enclosure 4) are attached. Also attached is a copy of the water quality certification letter issued October 2021 for this project (enclosure 5).

The SIC code for this project is 1629. Construction is scheduled to begin in February 2025 and is scheduled to be completed by December 2026.

If you have any questions or concerns regarding this permit application, please contact Ryan Horton at (601) 862-9820.

Sincerely,

Henry A. Dulaney, P.E.
Chief, Engineering and
Construction Division

ENCLOSURE 1. LCNOI

Yalobusha River Channel Maintenance

Large Construction Notice of Intent

AI: 17709

MSR109398

Rec'd via email:
10/02/2024

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**
- **Antidegradation report for disturbance within Waters of the State**

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

O.C

MSR10 9398

(NUMBER TO BE ASSIGNED BY STATE)

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

OWNER CONTACT INFORMATION

OWNER CONTACT PERSON: Henry A. Dulaney

OWNER COMPANY LEGAL NAME: US Army Corps of Engineers Vicksburg District

OWNER STREET OR P.O. BOX: 4155 East Clay Street

OWNER CITY: Vicksburg **STATE:** MS **ZIP:** 39183

OWNER PHONE #: (601) 631-7724 **OWNER EMAIL:** henry.a.dulaney@usace.army.mil

PREPARER CONTACT INFORMATION

IF NOI WAS PREPARED BY SOMEONE OTHER THAN THE APPLICANT

CONTACT PERSON: Ryan Horton

COMPANY LEGAL NAME: US Army Corps of Engineers Vicksburg District

STREET OR P.O. BOX: 4155 East Clay Street

CITY: Vicksburg **STATE:** MS **ZIP:** 39183

PHONE # ( ) 601-862-9820 **EMAIL:** ryan.d.horton@usace.army.mil

PRIME CONTRACTOR CONTACT INFORMATION

PRIME CONTRACTOR CONTACT PERSON: MVK Hired Labor (internal)

PRIME CONTRACTOR COMPANY LEGAL NAME: TBA

PRIME CONTRACTOR STREET OR P.O. BOX: 4155 East Clay Street

PRIME CONTRACTOR CITY: Vicksburg **STATE:** MS **ZIP:** 39183

PRIME CONTRACTOR PHONE #: (601) 862-9820 **PRIME CONTRACTOR EMAIL:**

FACILITY SITE INFORMATION

FACILITY SITE NAME: Yalobusha River Channel Maintenance (upstream of Grenada Lake)

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: Old Hwy 8

CITY: Big Creek, MS STATE: MS COUNTY: Calhoun County ZIP:

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

LATITUDE: 33 **degrees** 48 **minutes** 39 **seconds** **LONGITUDE:** 89 **degrees** 24 **minutes** 57 **seconds**

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

TOTAL ACREAGE THAT WILL BE DISTURBED [1]: 187 Acres

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: 2025-02-01 (YYYY-MM-DD)

ESTIMATED CONSTRUCTION PROJECT END DATE: 2026-12-01 (YYYY-MM-DD)

DESCRIPTION OF CONSTRUCTION ACTIVITY: Clearing and grubbing of vegetation along the banks of the river and removing any debris piles restricting flow of the Yalobusha River

PROPOSED DESCRIPTION OF PROPERTY USE AFTER CONSTRUCTION HAS BEEN COMPLETED:
River

SIC Code: 1629 ___ ___ **NAICS Code** ___ ___ ___ ___ ___ ___

NEAREST NAMED RECEIVING STREAM: Yalobusha River into Grenada Lake

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**)** YES ☑ NO ☐

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

FOR WHICH POLLUTANT: Sediment and Biological Impairment

ARE THERE RECREATIONAL STREAMS, PRIVATE/PUBLIC PONDS OR LAKES WITHIN ½ MILE DOWNSTREAM OF PROJECT BOUNDRY 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 POLYACRYLIMIDE (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?

IS A SDS SHEET INCLUDED FOR THE FLOCCULATE? YES ☐ NO ☐

WILL THERE BE A 50 FT BUFFER BETWEEN THE PROJECT DISTURBANCE AND THE WATERS OF THE STATE? YES ☐ NO ☐

IF NOT, PROVIDE EQUIVALENT CONTROL MEASURES IN THE SWPPP.

[1]Acreage for subdivision development includes areas disturbed by construction of roads, utilities and drainage. Additionally, a housesite of at least 10,000 ft^2 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 OF ANY KIND? (If yes, contact the U.S. Army Corps of Engineers' Regulatory Branch for permitting requirements.) YES ☐ NO ☑

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 THE PROJECT REROUTING, FILLING OR CROSSING A STATE WATER CONVEYANCE OF ANY KIND? (If yes, please provide an antidegradation report.) YES ☐ NO ☑

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

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

☐ **Existing Municipal or Commercial System. Please attach plans and specifications for the collection system and the associated "Information Regarding Proposed Wastewater Projects" form or approval from County Utility Authority in Hancock, Harrison, Jackson, Pearl River and Stone Counties. If the plans and specifications 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 (I.E. MS4)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.

Signature of Applicant[1] (owner or prime contractor)	**Date Signed**
Henry A. Dulaney P.E.	Chief, Engineering and Construction Division
Printed Name[1]	**Title**

[1]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

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

Revised 3/23/22

ENCLOSURE 2. SWPPP

Yalobusha River Channel Maintenance

Storm Water Pollution Prevention Plan and

Environmental Protection

PROJECT TABLE OF CONTENTS

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 00 00.00 09

GENERAL REQUIREMENTS

04/97

-- End of Section Table of Contents --

SECTION 01 00 00.00 09

GENERAL REQUIREMENTS
04/97

PART 1 GENERAL

1.1 DEFINITIONS

As these project specifications have been developed from regular construction contract guide specifications, there are numerous references throughout to "Contractor" and "Contracting Officer" that are not applicable to Vicksburg District hired labor projects. For the purpose of this project specification, the term "Contractor" wherever it appears is hereby defined as "U.S. Army Corps of Engineers, Vicksburg District, Operations Division". The term "Contracting Officer" wherever it appears is hereby defined as "Government's Quality Assurance Personnel". References to "contract", "cost", "payment", "expense", "contract clause", "contract price", "bid item" and "bidding schedule" are not applicable to this hired labor project and have been deleted to the extent practicable. Some other terms, phrases or language associated with regular construction contracts may unintentionally remain in these specifications, but may be disregarded if obviously not applicable to this project and upon mutual agreement with the Government's QA Personnel.

1.2 WORK IN QUARANTINED AREA

The work involves activities in counties quarantined by the Department of Agriculture to prevent the spread of certain plant pests which may be present in the soil. All construction equipment and tools to be moved from such counties shall be thoroughly cleaned of all soil residues at the construction site with water under pressure and that hand tools shall be thoroughly cleaned by brushing or other means to remove all soil. In addition, if this project involves the identification, shipping, storage, testing, or disposal of soils from such quarantined area, comply with the provisions of ER 1110-1-5, "Plant Pest Quarantined Areas and Foreign Soil Samples" attachments, a copy of which will be made available upon request.

1.3 PROCESS FOR OBTAINING CURRENT REQUIREMENTS OF THE U.S. ARMY CORPS OF ENGINEERS SAFETY AND HEALTH REQUIREMENTS MANUAL (EM 385-1-1)

Operations Division shall comply with the latest version, and all posted changes, of the U.S. Army Corps of Engineers Safety and Health Requirements Manual in effect on the issue date of this solicitation. EM 385-1-1 and changes are available on the Internet at http://www.usace.army.mil/publications/eng-manuals/em.htm, select "EM 385-1-1" for the manual.

1.4 CONTROL OF ACCESS TO CONSTRUCTION AREAS

Only personnel engaged in the work and others authorized shall be permitted to enter into the construction areas. Suitable barriers, warning signs and directives shall be placed to direct persons not engaged in the work away from the areas of danger.

1.5 RIGHTS-OF-WAY

a. The rights-of-way for the work to be constructed under this contract, within the limits indicated on the drawings, will be provided by the Government without cost to the Contractor. If these rights-of-way are used by the Contractor, he shall, at his own expense, do all work necessary to make such rights-of-way suitable for traveling to and from the worksite. Upon completion of the Contractor's work, any such rights-of-way furnished by the Government shall be left in a condition satisfactory to the Contracting Officer.

b. When so directed by the Contracting Officer, the Contractor shall, without expense to the Government and at any time during the progress of the work when it is not being actively used for contract operations, promptly vacate and clean up any part of the Government grounds or rights-of-way that have been allotted to or have been in use by the Contractor.

c. The Contractor shall not obstruct any existing roads on lands controlled by the United States except with written permission of the Contracting Officer and shall maintain such roads in as good condition as exists at the time of commencement of work under this contract.

d. The Contractor shall procure, without expense to the Government, all additional lands, access roads, or rights-of-way necessary for his use in the performance of the work or as required by his method of operation. The Contractor shall submit written evidence to the Contracting Officer that he has obtained the rights-of-way from the property owners. The written evidence shall consist of an authenticated copy of the conveyance under which the Contractor acquired such rights-of-way, prepared and executed in accordance with the laws of the State in which the land is located. The Contractor shall also obtain from the owners a release for the Government for any damages which may result from his use of such rights-of-way. The written conveyance and release shall be provided to the Government prior to use of Contractor obtained additional lands, access roads, or rights-of-way. If temporary rights-of-way are obtained by the Contractor the period of time for those rights shall coincide with Section 00 80 00.00 09 SPECIAL CONTRACT REQUIREMENTS, paragraph COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK, plus a reasonable time for any extension granted for the completion of the work. Any agreements or permits with levee boards, counties, parishes, municipalities, or other political subdivisions for moving material and equipment will be the responsibility of the Contractor and shall be obtained at no expense to the Government. Any delays to the Contractor resulting from delays in procuring such additional lands, access roads, rights-of-way, or permits for moving material and equipment for his work under this contract will not be a basis for any claim for increase in the cost of this contract. The Contractor shall make his own investigations to determine the conditions, restrictions and difficulties which may be encountered in acquiring such rights-of-way and in the transportation of material and equipment. In addition, the Contractor shall be solely liable for any and all damages and claims of any nature whatsoever arising from or growing out of the acquisition and use of rights-of-way, etc., other than those furnished by the Government.

e. Notwithstanding any language or drawings to the contrary in this contract, the United States will not provide access or rights-of-way

over any public lands and will not be responsible for acquiring such.

f. The Contractor shall repair at no expense to the Government, any and all damage to any existing roads when such damage is a result of his operations under this contract. (CEMVK-OC, 1989)

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 57 20.00 09

ENVIRONMENTAL PROTECTION

07/97

-- End of Section Table of Contents --

SECTION 01 57 20.00 09

ENVIRONMENTAL PROTECTION
07/97

PART 1 GENERAL

1.1 DEFINITIONS

Environmental pollution and damage is defined as the presence of chemical, physical, or biological elements or agents that adversely affect human health or welfare; unfavorably alter ecological balances of importance to life; or degrade the environment for aesthetic, cultural or historical purposes. Environmental protection is the prevention and/or control of pollution that develops during normal construction practice. The control of environmental pollution and damage requires consideration of air, water, soil, and land resources; and includes management of visual aesthetics; noise; solid, chemical, and liquid waste; radiant energy and radioactive materials; and other pollutants.

1.2 ENVIRONMENTAL PROTECTION REQUIREMENTS

A plan shall be developed to provide for environmental protective measures to prevent and/or control pollution that may develop during construction. The plan shall contain protective measures required to prevent or correct conditions that may develop during the construction. The liability for environmental noncompliance shall be borne by the Contractor.

1.2.1 Environmental Protection Plan

Within 15 days after receipt of Notice of Award of the contract and at least 7 days prior to the Preconstruction Conference, the Contractor shall submit in writing an Environmental Protection Plan. No physical work at the site shall begin until the Contracting Officer has approved the plan and provided specific authorization to start a phase of the work. Preparation and submittal of supplemental plan(s) may be necessary for later phases of work. A copy of the complete Environmental Protection Plan shall be maintained on-site at all times during the life of the contract. The environmental protection plan shall include but not be limited to the following:

1.2.1.1 Protection of Features

In accordance with the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS, the Contractor shall develop methods for the protection of features to be preserved within authorized work areas. The Contracting Officer will prepare a list of resources needing protection and preservation (i.e., trees, shrubs, vines, grasses and ground cover, wetlands, landscape features, air quality, noise levels, surface and ground water quality, fish and wildlife, soil, historic, archaeological and cultural resources). The Contractor's plan shall identify methods to protect these and other resources present and specify measures to protect the environment should an accident, natural causes of pollution, or failure to follow the environmental protection plan occur during construction. The Contractor's plan shall specify how the quality and protective measures of these resources shall be monitored. Furthermore the Contractor's plan shall specify how and where

waste shall be disposed.

1.2.1.2 Procedures

The Contractor shall implement procedures to provide the required environmental protection and to comply with the applicable laws and regulations. The Contractor shall set out the procedures to be followed to correct pollution of the environment due to accident, natural causes or failure to follow the procedures set out in accordance with the environmental protection plan.

1.2.1.3 Permit or License

The Contractor shall obtain all needed permits or licenses. The Contractor shall be responsible for complying with all permits and licenses throughout the duration of this contract.

1.2.1.4 Drawings

The Contractor shall include drawings identifying the areas of limited use or nonuse and show locations of any proposed temporary excavations or embankments for haul roads, stream crossings, material storage areas, structures, sanitary facilities, stockpiles of earth materials, and disposal areas for excess earth material and unsuitable earth materials.

1.2.1.5 Recycling and Waste Prevention Plan

The Contractor shall submit as a part of the Environmental Protection Plan, a Recycling and Waste Prevention Plan.

1.2.1.6 Environmental Monitoring Plans

The Contractor shall include environmental monitoring plans for the job site which incorporate land, water, air and noise monitoring.

1.2.1.7 Traffic Control Plan

The Contractor shall include a traffic control plan for the job site. This plan shall focus on reducing erosion of temporary roadbeds by construction traffic, especially during wet weather, and reducing the amount of mud transported onto paved public roads by motor vehicles or runoff.

1.2.1.8 Surface and Ground Water

The Contractor shall establish methods of protecting surface and ground water during construction activities. These water courses, including but not limited to all rivers, streams, bayous, lakes, ponds, bogs, and wetlands, shall be protected from pollutants such as petroleum products, fuels, oils, lubricants, bentonite, bitumens, calcium chloride, acids, waste washings, sewage, chlorinated solutions, herbicides, insecticides, lime, wet concrete, cement, silt, or organic or other deleterious material. Chemical emulsifiers, dispersants, coagulants, or other cleanup compounds shall not be used without prior written approval from the Contracting Officer. Waters used to wash equipment shall be disposed to prevent entry into a waterway until treated to an acceptable quality. Fuels, oils, greases, bitumens, chemicals, and other nonbiodegradable materials shall be contained with total containment systems and removed from the site for disposal in an approved manner.

1.2.1.9 Noise Intrusion

The Contractor shall exercise controls to minimize damage to the environment by noise from construction activities. All Contractor's, subcontractors', and suppliers' equipment used on or in the vicinity of the job site shall be equipped with noise suppression devices. Equipment not so suppressed and properly maintained must be approved for use in writing by the Contracting Officer. Areas that have noise levels greater than 85 dB continuous or 140 dB peak (unweighted) impulse must be designated as noise hazardous areas. These work areas must have caution signs displayed at the perimeter of the noise area indicating the presence of hazardous noise levels and requiring the use of hearing protection devices.

1.2.1.10 Work Area Plan

The Contractor shall include a work area plan showing the proposed activity in each portion of the area and identifying the areas of limited use or nonuse. The plan shall include measures for marking the limits of use areas.

1.2.1.11 Plan of Borrow Area(s)

All borrow areas will be furnished by the Government as shown on the drawings and as specified in Section 31 23 00.00 09 EXCAVATION. The Contractor shall include a plan of borrow area(s) for the project.

1.2.1.12 Contaminant Prevention Plan

The Contractor shall identify potentially hazardous substances to be used on the job site and intended actions to prevent accidental or intentional introduction of such materials into the air, water or ground. The Contractor shall detail provisions to be taken regarding the storage and handling of these materials. The plan shall include, but not be limited to, plans for preventing polluted runoff from plants, parked equipment, and maintenance areas from entering local surface and ground water sources.

1.3 ENVIRONMENTAL LITIGATION

a. If the performance of all or any part of the work is suspended, delayed, or interrupted due to an order of a court of competent jurisdiction as a result of environmental litigation, as defined below, the Contracting Officer, at the request of the Contractor, shall determine whether the order is due in any part to the acts or omissions of the Contractor, or a Subcontractor at any tier, not required by the terms of the contract. If it is determined that the order is not due in any part to acts or omissions of the Contractor, or a Subcontractor at any tier, other than as required by the terms of this contract, such suspension, delay, or interruption shall be considered as if ordered by the Contracting Officer in the administration of this contract under the terms of the SUSPENSION OF WORK clause of this contract. The period of such suspension, delay, or interruption shall be considered unreasonable, and an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) as provided in that clause, subject to all the provisions thereof.

b. The term "Environmental Litigation", as used herein, means a

lawsuit alleging that the work will have an adverse effect on the environment or that the Government has not duly considered, either substantively or procedurally, the effect of the work on the environment.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 PROTECTION OF ENVIRONMENTAL RESOURCES

The Contractor shall protect the environmental resources, such as, but not limited to, historic, archaeological and cultural resources; land, water (rivers, streams, bayous, lakes, ponds, bogs, and wetlands), and air resources; and fish and wildlife resources within the project boundaries and those affected outside the limits of permanent work under this contract.

3.1.1 Protection of Land Resources

In accordance with the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS, the land resources within the project boundaries and those affected outside the limits of work under this contract shall be preserved in their present condition or be restored to an equivalent condition upon completion of the work. Prior to initiating any construction, the Contractor shall identify all land resources to be preserved within the work area, including those identified by the Contracting Officer. The Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and landforms without permission from the Contracting Officer unless otherwise specified. No ropes, cables, or guys shall be fastened to or attached to any trees for anchorage unless specifically authorized. Where such special emergency use is permitted, the Contractor shall provide effective protection for land and vegetation resources at all times and shall be responsible for any subsequent damage as defined in the following subparagraphs.

3.1.1.1 Work Area Limits

Prior to any construction, the Contractor shall mark the areas within the designated work areas that are not required to accomplish work to be performed under this contract and which are to be protected. Isolated areas within the general work area which are to be saved and protected shall be marked or fenced. Monuments and markers shall be protected during construction. Where construction operations are to be conducted during darkness, the markers shall be visible. The Contractor shall convey to his personnel the purpose of marking and protecting all necessary objects.

3.1.1.2 Protection of Landscape

Trees, shrubs, vines, grasses, landforms and other landscape features, indicated and defined on the drawings to be preserved shall be clearly identified by marking, fencing, or wrapping with boards, or any other approved techniques.

3.1.1.3 USDA Quarantined Considerations

See Section 01 00 00.00 09 GENERAL CONTRACT REQUIREMENTS, paragraph WORK IN QUARANTINED AREA.

3.1.1.4 Location of Contractor On-Site Facilities

The Contractor's on-site field offices, staging areas, stockpile storage, and temporary buildings shall be placed in approved areas. Temporary movement or relocation of Contractor on-site facilities shall be only on approval by the Contracting Officer.

3.1.1.5 Borrow Areas

Borrow areas on and off Government right-of-way shall be managed by the Contractor to minimize erosion and to prevent sediment from entering rivers, streams, bayous, lakes, ponds, bogs, and wetlands, or affecting known or discovered cultural resource properties.

3.1.1.6 Disposal Areas on Government Property

Material disposal on government property shall be limited to those areas designated on the contract drawings The disposal areas shall be managed and controlled to prevent erosion of soil or sediment from entering rivers, streams, bayous, lakes, ponds, bogs, and wetlands. Special emphasis shall be placed on avoiding impacts to wetlands. Disposal areas shall be developed and managed in accordance with the grading plan indicated on the contract drawings or as approved.

3.1.1.7 Disposal of Solid Wastes

Solid wastes (not including clearing debris) shall be any waste excavated or generated by the Contractor. Solid waste shall be placed in accessible containers and disposed on a regular schedule to prevent the accumulation of waste on-site. All handling and disposal shall be conducted to prevent spillage and contamination. The Contractor shall transport all solid waste off government property and dispose properly. The Contractor shall participate in any State or local recycling programs to reduce the volume of solid waste materials at the source whenever practical. The location of on-site waste receptacles cannot be placed on project drawings due to the linear nature of the project. The location of solid waste receptacles is expected to move with the progress of the project.

3.1.1.8 Disposal of Hazardous Wastes

Hazardous waste shall be stored, removed from the work area, and disposed of in accordance with all applicable Federal, State, and local laws and regulations. Hazardous waste shall not be dumped onto the ground; into storm sewers; or open water courses, including but not limited to all rivers, streams, bayous, lakes, ponds, bogs, and wetlands; or into the sanitary sewer system. Fueling and lubrication of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spills and evaporation.

3.1.1.9 Disposal of Discarded Materials

Discarded materials that cannot be included in the solid waste category shall be handled as approved.

3.1.1.10 Disposal of Used Oils

Used oils and/or lubricants shall be disposed of in accordance with all Federal, State, and local laws and regulations. The Contractor shall collect used oil and/or lubricants in leak-tight containers, ensure that all openings on the containers are tightly sealed (including the drum ring and bung closures), and label the containers to clearly indicate contents. Disposal through a used oil recycler is required. The Contractor shall ensure that the recycler has all appropriate State and Federal permits.

3.1.1.11 Refueling Facilities and Equipment Maintenance Areas

Fuel tanks should have secondary containment measures to ensure that fuel does not leave the construction site and enter into nearby water bodies or wetlands. The contractor shall provide a Spill Prevention, Control, and Countermeasure (SPCC) Plan for fuel tanks that will be stored on-site. Necessary controls to implement the SPCC Plan shall be on-site in an accessible location for use if a spill does occur. All refueling operations shall be performed in a manner as to prevent fuels from leaving the construction site and entering water bodies or wetlands. Equipment maintenance operations shall also be performed in a manner to prevent fuel, oils, and grease from leaving the site and entering water bodies or wetlands. The location of on-site fueling operations and maintenance activities are not on project drawings due to the linear nature of the project. The location of the refueling and maintenance activities is expected to move with the progress of the project.

3.1.1.12 Storage of Herbicides, Pesticides, and Fertilizers

Herbicides, Pesticides, and Fertilizers that are to be used in the construction of the project shall be either stored off-site or in a waterproof container to prevent the movement of these chemicals off-site from stormwater. Due to the linear nature of the project, the location of the storage facilities for herbicides, pesticides, and fertilizers is not shown on the project drawings.

3.1.2 Historical, Archaeological and Cultural Resources

The Contractor shall take precautions to preserve existing historical, archaeological and cultural resources. The Contractor shall install protection for these resources and shall be responsible for their preservation during this contract. If during construction activities the Contractor observes items that may have archaeological or historic value (e.g., when Native American human remains and associated objects are discovered), the Contractor shall stop work in the area, leave the items undisturbed, and immediately report the find to the Contracting Officer. Such items may include historic artifacts of glass, metal and ceramics, or prehistoric artifacts such as stone tools, ceramics, bone, and shell. The Contractor shall not judge the potential significance of any suspected cultural material, but shall report all findings to the Contracting Officer.

3.1.3 Protection of Water Resources

The Contractor shall keep construction activities under surveillance, management, and control to avoid pollution of surface and ground waters, including but not limited to all rivers, streams, bayous, lakes, ponds, bogs, and wetlands. All construction activities shall meet the

requirements of the National Pollutant Discharge Elimination System (NPDES) General Permits for Storm Water Discharges from Construction Sites. Discharges of any pollutant into the water courses is strictly prohibited, unless accepted by the Contracting Officer.

3.1.3.1 Waste Water

Waste water directly derived from washing equipment, curing concrete, cleaning joints, or any other construction activities shall not be discharged into any natural water areas, including but not limited to all rivers, streams, bayous, lakes, ponds, bogs, and wetlands.

3.1.3.2 Monitoring of Water Areas Affected by Construction Activities

The Contractor shall be responsible for monitoring all water areas affected by construction activities. In the event that water quality violations result from the Contractor's operation, the Contractor shall suspend the operation or operations causing the pollution, and such suspension shall not form the basis for a claim against the Federal government.

3.1.4 Protection of Aquatic and Wildlife Resources

The Contractor shall keep construction activities under surveillance, management, and control to prevent interference with, disturbance to, and damage to aquatic resources and/or wildlife, including but not limited to all rivers, streams, bayous, lakes, ponds, bogs, and wetlands. Special emphasis shall be placed on protecting wetlands. Species that require specific attention as defined by law or specified by the Contracting Officer, along with measures for their protection, shall be listed by the Contractor prior to beginning of construction operations.

3.1.5 Protection of Air Resources

The Contractor shall keep construction activities under surveillance, management and control to minimize pollution of air resources. Special management techniques as set out below shall be implemented to control air pollution by the construction activities.

3.1.5.1 Particulates

Dust particles, aerosols, and gaseous by-products from all construction activities, disturbed areas, and/or processing and preparation of materials, such as from asphaltic batch plants, shall be controlled at all times, including weekends, holidays, and hours when work is not in progress. The Contractor shall maintain all excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, disposal sites, borrow areas, and all other work areas within or outside the project boundaries free from particulates which would cause air pollution standards specified in paragraph PROTECTION OF AIR RESOURCES to be exceeded or which would cause a hazard or a nuisance. Sprinkling, chemical treatment of an approved type, light bituminous treatment, baghouse, scrubbers, electrostatic precipitators, or other methods will be permitted to control particulates in the work area. Sprinkling shall be repeated at such intervals as to keep the disturbed area damp at all times.

3.1.5.2 Hydrocarbons and Carbon Monoxide

Hydrocarbons and carbon monoxide emissions from equipment shall be

controlled to Federal, State, and local allowable limits at all times.

3.1.5.3 Volatile Organic Compound (VOC)

The Contractor shall comply with Federal, State, and local laws and regulations pertaining to emission of VOC vapors at all times.

3.1.5.4 Odors

Odors shall be controlled at all times for all construction activities, including processing and preparation of materials.

3.1.5.5 Monitoring Air Quality

Monitoring of air quality at the construction site(s) shall be the responsibility of the Contractor.

3.2 NONCOMPLIANCE

If the Contracting Officer notifies the Contractor in writing of any observed noncompliance with contract requirements or Federal, State, or local laws, regulations, or permits, the Contractor shall take all necessary action to correct the noncompliance. Such notice, when delivered to the Contractor at the worksite, shall be deemed sufficient for the purpose of notification. If the Contractor fails to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action is taken. No time extensions will be granted or costs or damage allowed to the Contractor for any such suspension. (See also the Contract Clause PERMITS AND RESPONSIBILITIES.)

3.3 CONTAINMENT AND CLEANUP OF CONTAMINANT RELEASES

The Contractor shall provide the Contracting Officer for approval, a contaminant containment and cleanup plan including the procedures, instructions, and reports to be used in the event of an unforeseen substance release. This plan shall include as a minimum:

a. The name of the individual who will be responsible for implementing and supervising the containment and cleanup.

b. A list of materials and equipment to be immediately available at the job site, tailored to cleanup work of the potential hazard(s) identified.

c. The names and locations of suppliers of containment materials and locations of additional fuel oil recovery, cleanup, restoration, and material placement equipment available in case of an unforeseen spill emergency.

d. The methods and procedures to be used for expeditious contaminant cleanup.

e. The name of the individual who will report any spills or hazardous substance releases and who will follow up with complete documentation. This individual shall immediately notify the Contracting Officer in addition to the legally required reporting channels when a reportable quantity spill of oil or hazardous substance occurs.

3.4 POSTCONSTRUCTION CLEANUP

The Contractor shall clean up areas used for construction and remove all signs of temporary construction facilities; Contractor office, storage and staging areas; quarry and borrow areas, and all other areas used by the Contractor during construction. Furthermore, the disturbed areas shall be graded and filled as approved by Contracting Officer. Restoration of original contours is not required unless specified in another section. (See also the Contract Clause CLEANING UP.)

3.5 RESTORATION OF LANDSCAPE DAMAGE

All landscape features damaged or destroyed during construction operations that were not identified for removal shall be restored. Any vegetation or landscape feature damaged shall be restored as nearly as possible to its original condition. (See also the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS.)

3.6 MAINTENANCE OF POLLUTION FACILITIES

The Contractor shall maintain all constructed facilities and portable pollution control devices for the duration of the contract or for the length of time construction activities create the particular pollutant.

3.7 TRAINING OF CONTRACTOR PERSONNEL IN POLLUTION CONTROL

Contractor personnel shall be trained in environmental protection and conduct environmental protection meetings monthly. The training and meeting agenda shall include methods of detecting and avoiding pollution, wetland identification, familiarization with pollution standards, both statutory and contractual, and installation and care of facilities (vegetative covers, and instruments required for monitoring purposes) to insure adequate and continuous environmental pollution control. Personnel are to be informed of provisions for hazardous and toxic materials container labeling and for managing Material Safety Data Sheets (MSDS). Anticipated hazardous or toxic chemicals shall also be reviewed. Other items to be discussed shall include recognition and protection of archaeological sites, artifacts, and wetlands. The Contractor shall include training topics discussed and attendance as a part of his daily CQC Report.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 57 23.00 09

STORM WATER POLLUTION PREVENTION PLAN

11/03

-- End of Section Table of Contents --

SECTION 01 57 23.00 09

STORM WATER POLLUTION PREVENTION PLAN
11/03

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM D4354	(2012) Sampling of Geosynthetics for Testing
ASTM D4439	(2015a) Standard Terminology for Geosynthetics
ASTM D4491/D4491M	(2015) Standard Test Methods for Water Permeability of Geotextiles by Permittivity
ASTM D4533	(2011) Trapezoid Tearing Strength of Geotextiles
ASTM D4632/D4632M	(2015a) Grab Breaking Load and Elongation of Geotextiles
ASTM D4751	(2016) Standard Test Method for Determining Apparent Opening Size of a Geotextile
ASTM D4759	(2011) Determining the Specification Conformance of Geosynthetics
ASTM D4873/D4873M	(2016) Identification, Storage, and Handling of Geosynthetic Rolls and Samples

1.2 SYSTEM DESCRIPTION

All construction activities conducted by the Contractor shall be performed in full compliance with the latest version of the State of Mississippi Large Construction Storm Water General Permit for storm water discharges from construction activities. Pursuant to the State of Mississippi Large Construction Storm Water General Permit for storm water discharges from construction activities, the requirements contained herein shall constitute the Storm Water Pollution Prevention Plan, hereafter called the SWPP Plan for this contract. The Contractor shall implement and diligently pursue all measures required herein. The purpose of the SWPP Plan is to control soil erosion and storm water runoff caused by the construction activities under this contract to the extent necessary to prevent sediment from accumulating in existing drainage ditches, leaving the contract rights-of-way, or entering the streams at each site as shown on the drawings. Requirements under this section of the specifications are supplemental to and shall become part of the overall Environmental

Protection Plan required by Section 01 57 20.00 09 ENVIRONMENTAL PROTECTION.

1.2.1 Permit Notifications

The Contractor shall notify the permitting agency by certifying and submitting a Prime Contractor Certification Form and Notice of Termination as required by the Large Construction Storm Water General Permit for storm water discharges for this project as stated below. The Contractor shall maintain copies of all correspondence with the permitting agency with the SWPP Plan for the duration of this contract.

1.2.2 Prime Contractor Certification Form

A Large Construction Notice of Intent (LCNOI) and the SWPPP required by the State of Mississippi will be filed by the Government with the permitting agency prior to the award of this contract. The Contractor shall complete the Prime Contractor Certification form indicating that he takes responsibility for permit compliance and meeting permit conditions prior to the commencement of construction activities. The Contractor shall certify and submit the Prime Contractor Certification form to the permitting agency at least 48 hours prior to beginning work. The Contractor shall furnish two (2) copies of the submitted documentation to the Contracting Officer.

1.2.3 Notice of Termination (NOT) of Coverage

Upon successful completion of all permanent erosion and sediment controls for this project, and at the direction of the Contracting Officer, the Contractor shall submit a Notice of Termination (NOT) of Coverage to the Mississippi Department of Environmental Quality stating that all permanent erosion and sediment controls have been completed. The Contractor shall also provide three copies of the submitted documentation to the Contracting Officer and one copy to U.S. Army Corps of Engineers, Vicksburg District, 4155 Clay Street, Vicksburg, Mississippi 39183-3435, Attn: Water Quality Section.

1.2.4 Inspection Suspension Form

The Contractor may request the suspension of weekly inspection and monthly reporting requirements on portions of the project area if the Contractor certifies that: (1) land disturbing activities have temporarily ceased; (2) no further land disturbing activities are planned for a period of at least 6 months; (3) the site is stable with no active erosion; and (4) vegetative cover has been established.

The Contractor shall submit to the permitting agency a completed Inspection Suspension Form along with color photographs representative of the site as stipulated in the Large Construction Storm Water General Permit. The Contractor shall notify MDEQ once construction activities are resumed and the weekly inspections shall commence immediately and as required by the permit. The Contractor shall still be responsible for all permit conditions during any suspension period.

1.3 SITE DESCRIPTION

1.3.1 Nature of Construction Activity

The work consists of furnishing all plant, labor, materials and equipment, and completing channel maintenance on the Yalobusha River in Calhoun County, Mississippi. Principle features of work include clearing and grubbing; excavation; control of water; fertilizing, seeding and mulching; storm water pollution prevention; and environmental protection.

1.3.2 Major Activities Which Disturb Soils

The major activities which will disturb the soil at the site include clearing and grubbing, excavation, embankment construction, and grading.

1.3.3 Estimated Areas Affected

The approximate area of each construction site and the area of soil that will be disturbed within each construction site is:

Site	Construction Area (Acres)	Disturbed Area (Acres)
SITE Channel Maintenance	187	187

1.3.4 Runoff Coefficient

The estimated runoff coefficient at the site will be 0.35 after construction activities are completed.

1.3.5 Contract Drawings and Specifications

The following features are shown on or can be determined from the contract drawings and specifications:

a. The approximate slopes after the major construction activities.

b. Areas of soil disturbance.

c. The location where stabilization practices are required.

d. The location of major structural and nonstructural controls identified in the SWPP Plan.

e. Surface waters.

f. Locations where storm water is discharged into a surface water.

g. Typical best management practices which are anticipated to be used in the control of sediment and erosion control.

1.3.6 Waters Affected

The surface water which may be affected by this contract is the Yalobusha River. The following TMDLs have been conducted for Yalobusha River for the following impairments: Sediment and Biological Impairment. This project along with the proposed BMPs will not contribute to the impairment of the nearby waterbody.

1.4 CONTROLS

The controls and measures required by the Contractor are described below.

1.4.1 Erosion and Sediment Controls

1.4.1.1 Stabilization Practices

a. General - The stabilization practices required to be implemented shall include permanent seeding, mulching, sod stabilization, erosion control matting, protection of trees, preservation of mature vegetation, etc. However, the Contractor may, at his option and at no additional cost to the Government, provide a fall and winter temporary erosion control measure by seeding with rye grass or other approved winter grasses. The Contractor shall maintain a log of the dates when the major grading activities occur, (e.g. clearing and grubbing, excavation, embankment construction, and grading); when construction activities permanently cease on a portion of the site; and when stabilization practices are initiated, and shall attach this log to the SWPP Plan. Soil stabilization-vegetative stabilization measures must be initiated whenever any clearing, grading, grubbing, excavating or other land disturbing activities have temporarily or permanently ceased on any portion of the site and will not resume for a period of fourteen (14) calendar days or more. The appropriate temporary or permanent vegetative practices shall be initiated immediately.

b. Interim Stabilization Practices - The interim stabilization practices required are described below.

(1) Only trees that are within the indicated limits to construct the permanent work shall be removed.

(2) Existing vegetative cover shall be preserved to the extent possible to reduce erosion.

c. Permanent Stabilization Practices - The permanent stabilization practices to be implemented are described below.

(1) Permanent seeding (erosion control) shall be performed as soon as practicable after the final grading is completed in accordance with Section 32 92 02.00 09 FERTILIZING, SEEDING AND MULCHING.

(2) Mulch shall be placed on areas of erosion control treatment as specified.

1.4.1.2 Structural Practices

a. General - Structural practices shall be implemented to divert flows from exposed soils, temporarily store flows, or otherwise control runoff in order to prevent sediments from accumulating in existing drainage ditches, or entering the streams at each site as shown on the drawings. The Contractor shall implement the required structural practices and the necessary structural practices as may be required to control runoff for his construction methods and procedures. The installation of these measures may be subject to Section 404 of the Clean Water Act. The Contractor shall be responsible for obtaining the Section 404 permit if required for any structural practice he proposes to implement. Structural practices

shall be implemented in a timely manner during the construction process to minimize erosion and sediment runoff. Structural practices shall be removed after they have served their intended purpose and after their removal has been approved by the Contracting Officer.

b. Devices - Structural practices may include but shall not be limited to the following devices (typical details are shown on the drawings):

(1) Silt fences

(i) General

Filter fabric shall meet the requirements of PART 2 PRODUCTS, paragraph FILTER FABRIC.

Filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of six months of expected usable construction life at a temperature range of 0 degrees F to 120 degrees F.

If wooden stakes are utilized for silt fence construction, they shall have a minimum diameter of 2 inches when oak is used and 4 inches when pine is used. Wooden stakes shall have a minimum length of 5 feet.

If steel posts (standard "U" or "T" section) are utilized for silt fence construction, they shall have a minimum weight of 1.33 pounds per linear foot and a minimum length of 5 feet.

Wire fence reinforcement for silt fences using standard strength filter fabric shall be a minimum of 14 gauge and shall have a maximum mesh spacing of 6 inches.

(ii) Installation

The height of a silt fence shall be a minimum of 16 inches above the ground surface and shall not exceed 34 inches above the ground surface.

The filter fabric shall be purchased in a continuous roll cut to the length of the barrier to avoid the use of joints. When joints are unavoidable, filter fabric shall be spliced together only at a support post with a minimum 6 inch lap and securely sealed.

A trench shall be excavated approximately 4 inches wide and 4 inches deep on the upslope side of the proposed location of the measure.

When wire support is used, standard-strength filter fabric may be used. Posts for this type of installation shall be placed a maximum of 10 feet apart. The wire mesh fence shall be fastened securely to the upslope side of the posts using heavy duty wire staples at least 1 inch long, tie wires or hog rings. The wire shall extend into the trench a minimum of 2 inches and shall not extend more than 34 inches above the ground surface. The standard strength fabric shall be stapled or wired to the wire fence, and 8 inches of the fabric shall be extended into the trench. The fabric shall not be stapled to existing trees.

When wire support is not used, extra-strength filter fabric shall be used. Posts for this type of fabric shall be placed a maximum of 6 feet apart. The filter fabric shall be fastened securely to the upslope side of the posts using 1 inch long (minimum) heavy-duty wire staples or tie wires and 8 inches of the fabric shall be extended into the trench. The fabric shall not be stapled to existing trees.

The 4 inch by 4 inch trench shall be backfilled and the soil compacted over the filter fabric.

Silt fences shall be used to mitigate for storm water runoff from the excavation material temporarily stockpiled onsite.

(2) Hay Wattles.

(i) Installation

Wattles shall be installed in a two inch deep trench that is constructed along the contour, perpendicular to the slope or direction of flow. Ends of the wattles shall be turned up the slope, to catch water runoff, reduce water velocity, and control sediment transport under low to medium flow conditions.

Wattles shall be secured to the subgrade by crossing wooden stakes spaced every three linear feet across the length of the wattle. Anchoring wood stakes shall be sized, spaced, driven, and be of a material that effectively secures the wattle (do not anchor through wattle netting). Stakes shall be placed within one foot of the end of the wattle. The placement interval between wattle ditch checks shall be one hundred feet unless shown otherwise on the plans or erosion control plan approved by the contracting officer. When joining two wattles, tightly abut both ends or overlap the wattles approximately six inches (wattles shall be overlapped six inches in channelized flow applications). If wattles are joined together by abutting the ends, tie the ends together using heavy twine or plastic locking ties.

When installing in a channel bottom, installation shall continue three feet above the anticipated high water mark.

Wattles shall remain in place until fully established vegetation and root systems are present and can survive on their own. Wattles shall be removed upon approval by the Contracting Officer.

(3) Temporary Diversion Dikes

(i) Installation

Temporary diversion dikes shall have a maximum channel slope of 2 percent and shall be adequately compacted to prevent failure. The minimum height measured from the top of the dike to the bottom of the channel shall be 18 inches. The minimum base width shall be 6 feet and the minimum top width shall be 2 feet. Temporary diversion dikes shall be located to minimize damages caused by construction operations and traffic.

c. Device Applicability

(1) Hay wattles, silt fences, earth dikes, and drainage swales for diversion of runoff upstream from work areas.

(2) Hay wattles, silt fences and earth dikes for retention of flow in drains.

(3) Stone outlet protection at culverts.

(4) Sediment containment by providing hay wattles or silt fences along the toe of fill and cut slopes.

(5) Earth dikes for temporary sediment basins in major drainage channels downstream from work areas.

Structural practices shall be properly placed to effectively retain sediment immediately after completing each phase of work (e.g. clearing and grubbing, excavation, embankment construction, and grading) in each independent runoff area (e.g. after clearing and grubbing in an area between a ridge and drain). Structural practices shall be placed, and as work progresses, removed/replaced/relocated as needed for work to progress in each runoff area. Structural practices, to the extent necessary to prevent sediment from accumulating in existing drainage ditches, or entering the streams at each site as shown on the drawings, shall be implemented as follows:

(1) Along the downhill perimeter edge of disturbed areas.

(2) Along the top of the slope or top bank of drainage ditches, channels, swales, etc. that traverse disturbed areas.

(3) Along the toe of cut slopes and fill slopes of the construction areas.

(4) Perpendicular to the flow in the bottom of existing drainage ditches, channels, swales, etc. that traverse disturbed areas or carry runoff from disturbed areas. Rows of hay wattles or silt fences shall be spaced a maximum of 100 feet apart in such existing drains that are within the limits of the work.

(5) Perpendicular to the flow in the bottom of new drainage ditches, channels, and swales. Rows of hay wattles or silt fences shall be spaced a maximum of 200 feet apart in drains with slopes equal to or less than 5 percent and 100 feet apart in drains with slopes steeper than 5 percent.

(6) At the entrance to culverts that receive runoff from disturbed areas.

1.4.2 Storm Water Management

1.4.2.1 Management Practices

The storm water management practices that shall be permanently installed under this contract are as follows:

a. Fertilizing, seeding, and mulching.
b. Stone protection.

1.4.2.2 Methods

a. Erosion control shall be in accordance with Section 32 92 02.00 09 FERTILIZING, SEEDING AND MULCHING.

b. Stone protection shall be in accordance with Section 31 37 00.00 09 STONE PROTECTION.

1.4.3 Other Controls

1.4.3.1 Waste Disposal

No solid materials, including building materials, shall be discharged to waters of the United States, except as authorized by a Section 404 permit. Other requirements are included in Section 01 57 20.00 09 ENVIRONMENTAL PROTECTION.

1.4.3.2 Off-site Vehicle Tracking

Off-site vehicle tracking of sediments shall be minimized. The contractor shall implement the use of a construction entrance and exit mitigation measures. A typical coarse aggregate example is shown on sheet C-503 of the plans. Any sediment that has been tracked out from the site onto paved road, sidewalks, etc. shall be removed immediately no later than the end of the next workday

1.4.3.3 Compliance with Regulations

The Contractor shall ensure and demonstrate compliance with applicable State or local waste disposal, sanitary sewer or septic system regulations. Sanitary facilities shall be provided and adequately maintained during the course of construction.

PART 2 PRODUCTS

2.1 FILTER FABRIC FOR SILT SCREEN FENCE

The geotextile, as defined by ASTM D4439, shall consist of polymeric filaments which are formed into a stable network such that filaments retain their relative positions. The filament shall consist of a long-chain synthetic polymer composed of at least 85 percent by weight of ester, propylene, or amide, and shall contain stabilizers and/or inhibitors added to the base plastic to make the filaments resistance to deterioration due to ultraviolet and heat exposure. The geotextile shall conform to the physical property requirements in paragraph ACCEPTANCE REQUIREMENTS, subparagraph TESTING.

2.2 ACCEPTANCE REQUIREMENTS

2.2.1 General

All brands of geotextile to be used will be accepted on the following basis.

2.2.2 Mill Certificates or Affidavits

The mill certificate or affidavit shall attest that the filter fabric and factory seams meet chemical, physical, and manufacturing requirements

specified. The mill certificate of affidavit shall specify the actual Minimum Average Roll Values and shall identify the fabric supplied by roll identification numbers.

2.2.3 Testing

If requested by the Contracting Officer, Government personnel shall collect filter fabric samples in accordance with ASTM D4354 for testing to determine compliance with any or all of the requirements specified pursuant to ASTM D4759 and the following table:

EXTRA STRENGTH FILTER FABRIC FOR SILT SCREEN FENCE

PHYSICAL PROPERTY	TEST PROCEDURE	REQUIREMENTS
Grab Tensile Strength	ASTM D4632/D4632M	100 lbs. min.
Elongation (%)	ASTM D4632/D4632M	30 % max.
Trapezoid Tear	ASTM D4533	55 lbs. min.
Permittivity	ASTM D4491/D4491M	0.2 sec-1 min.
AOS (U.S. Std Sieve)	ASTM D4751	20-100

NOTE: Standard strength filter fabric for silt screen fence shall meet the same minimum requirements for AOS and Permittivity as the extra strength filter fabric, but may have lower strengths for the remaining properties listed in the table.

2.3 IDENTIFICATION, STORAGE AND HANDLING

Filter fabric shall be identified, stored and handled in accordance with ASTM D4873/D4873M.

PART 3 EXECUTION

3.1 MAINTENANCE

The Contractor shall maintain the temporary and permanent vegetation, erosion and sediment control measures, and other protective measures in good and effective operating condition by performing routine inspections to determine condition and effectiveness, by restoration of destroyed vegetative cover, and by repair of erosion and sediment control measures and other protective measures. The following procedures shall be followed to maintain the protective measures identified in the SWPP Plan.

a. Silt Fences

Silt fences shall be inspected in accordance with paragraph INSPECTIONS. Any required repairs shall be made promptly. Close attention shall be paid to the repair of damaged silt fence resulting from end runs and undercutting. Should the fabric on a silt fence decompose or become ineffective, and the barrier is still necessary, the fabric shall be replaced promptly. Sediment deposits shall be removed when deposits reach one-third of the height of the barrier or a maximum height of 9 inches. When a silt fence is no longer required, it shall be removed. The immediate area occupied by the fence and any sediment deposits shall be shaped to an acceptable

grade. The areas disturbed by this shaping shall receive erosion control in accordance with Section 32 92 02.00 09 FERTILIZING, SEEDING AND MULCHING.

b. Hay Wattles

Hay wattles shall be inspected in accordance with paragraph INSPECTIONS. Close attention shall be paid to the repair of damaged hay wattles and necessary repairs shall be accomplished promptly. Sediment deposits shall be removed when deposits reach one-half of the height of the barrier. When a hay wattle is no longer required, it shall be removed. The immediate area occupied by the wattles and any sediment deposits shall be shaped to an acceptable grade. The areas disturbed by this shaping shall receive erosion control in accordance with Section 32 92 02.00 09 FERTILIZING, SEEDING AND MULCHING.

c. Temporary Diversion Dikes

Temporary diversion dikes shall be inspected in accordance with paragraph INSPECTIONS. Close attention shall be paid to the repair of damaged temporary diversion dikes and necessary repairs shall be accomplished promptly. When temporary diversion dikes are no longer required, they shall be shaped to an acceptable grade. The areas disturbed by this shaping shall receive erosion control in accordance with Section 32 92 02.00 09TOPSOIL, FERTILIZING, SEEDING AND MULCHING.

3.2 INSPECTIONS

3.2.1 General

Disturbed areas of the construction site, areas used for storage of materials that are exposed to precipitation that have not been finally stabilized, stabilization practices, structural practices, other controls, and areas where vehicles exit the site shall be inspected by the Contractor at least weekly for a minimum of four inspections per each month and after rainfall events that produce a discharge; and as often as necessary to ensure that appropriate erosion and sediment controls have been properly constructed and maintained, and to determine if additional or alternative control measures are required. The Contractor shall perform a "walk through" inspection of the construction site before anticipated storm events. Where sites have been finally stabilized, such inspection shall be conducted at least once every month.

3.2.2 Field Inspections

Disturbed areas and areas used for material storage that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the SWPP Plan shall be observed to ensure that they are operating correctly. Discharge locations or points shall be inspected to ascertain whether storm water pollution prevention measures are effective in preventing significant impacts to receiving waters. Locations where vehicles exit the site shall be inspected for evidence of offsite sediment tracking.

3.2.3 Inspection Reports

For each inspection conducted, the Contractor shall complete a Inspection and Certification Form for Erosion and Sediment Controls. The report shall

be signed by the Contractor. The report shall be furnished to the Contracting Officer within 24 hours of the inspection as a part of the Contractor's daily CQC REPORT. A complete log of the inspections shall be maintained on the job site and become a part of the SWPP Plan.

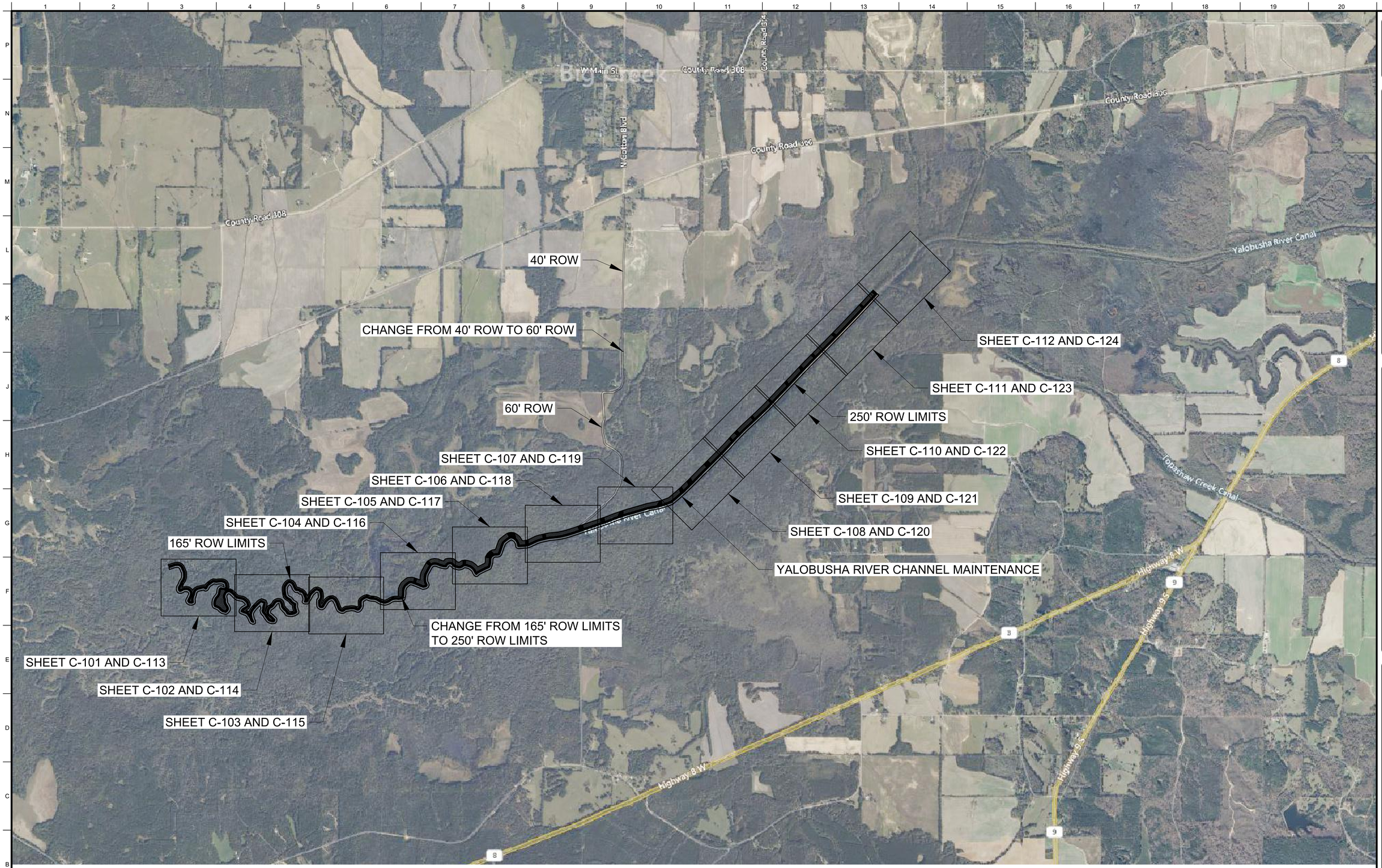
3.2.4 Revisions to the SWPP Plan

Based on the results of the inspection and immediately after the inspection, the Contractor shall provide to the Contracting Officer any recommended changes to the SWPP Plan. The Contracting Officer will approve or disapprove the proposed changes within seven (7) calendar days after receipt. Changes to the SWPP Plan shall be implemented within seven (7) calendar days following approval.

3.2.5 Inspection and Maintenance

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."

-- End of Section --



A1 AERIAL PHOTOGRAPH - YALOBUSHA RIVER CHANNEL MAINTENANCE
SCALE: 1"=1,500'

N

0 1,500 3,000 FEET

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

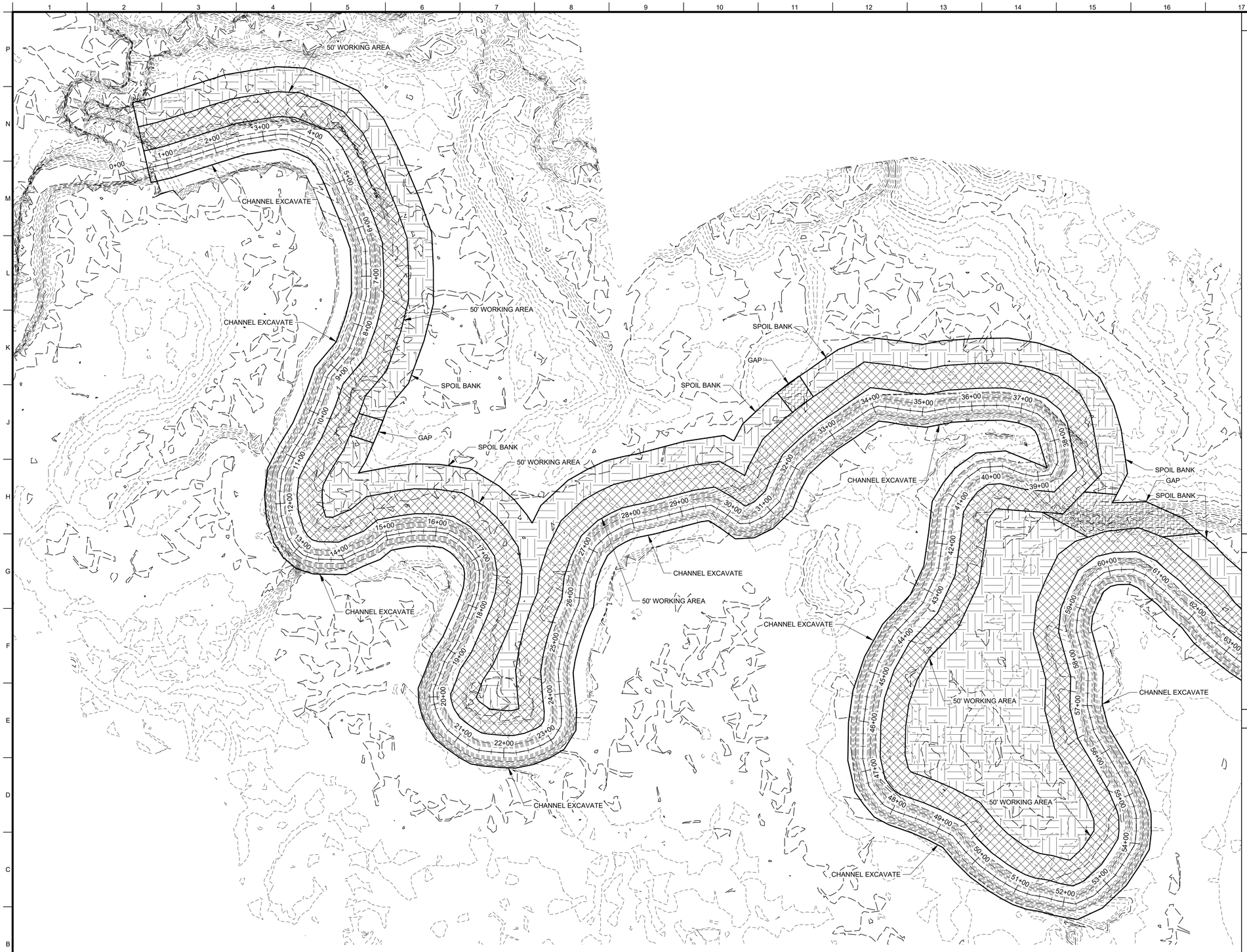
DESIGNED BY:	ISSUE DATE:
N. MORROW	SEPTEMBER 2024
DRAWN BY:	SOLICITATION NO.:
N. MORROW	XXXXXX-XX-X-XXXX
CHECKED BY:	CONTRACT NO.:
B. GRIFFIN	XXXXXX-XX-X-XXXX
SUBMITTED BY:	
DAVID L. WALLACE, P.E.	
SIZE:	
ANSI D	

U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
ACME SECTION
VICKSBURG, MS

CALHOUN COUNTY, MS
YALOBUSHA RIVER CHANNEL MAINTENANCE
FCM/R&T YAZOO RIVER BASIN
YALOBUSHA RIVER WATERSHED

AERIAL PHOTOGRAPH
YALOBUSHA RIVER CHANNEL MAINTENANCE

SHEET ID
G-403



NOTES:

1. EXISTING GROUND SURVEY DATA WAS COLLECTED IN 2023.
2. MISSISSIPPI STATE PLANE COORDINATES EAST ZONE (2011) NAD83 (2017). ELEVATIONS IN FEET, NAVD88.
3. FOR CENTERLINE PROFILE OF THE YALOBUSHA RIVER, SEE SHEET C-201 TO C-20X.
4. GAPS SHALL BE LEFT IN THE DISPOSAL AREAS AT ALL EXISTING DRAINS, TRIBUTARY DITCHES, STREAMS, EXISTING GAPS, AND AT ADDITIONAL INTERVALS AS NECESSARY, BUT NOT TO EXCEED 1500 FEET, SO AS NOT TO IMPOUND WATER BEHIND THE DISPOSAL ARES, UNLESS OTHERWISE APPROVED.
5. ALL CLEANING OPERATIONS SHALL BE CONDUCTED IN A MANNER TO PREVENT ANY CLEARED MATERIALS FROM ENTERING THE STREAM CHANNEL.
6. A SMOOTH TRANSITION FOR CHANGES IN THE SIDE SLOPES SHALL BE PROVIDED AT THE DOWNSTREAM AND UPSTREAM ENDS OF THE WORK.
7. THE EXCAVATED MATERIAL SHALL BE SPREAD, COMPACTED, AND EROSION CONTROL APPLIED.
8. IN ACCORDANCE WITH SHEET C-502 HAY WATTLES SHALL BE PLACED AT ALL GAPS IN THE SPOIL BANK.
9. IN ACCORDANCE WITH SHEET C-502 SILT FENCE SHALL BE PLACED THE LENGTH OF THE ENTIRE PROJECT, EXCEPT IN AREAS WHERE BRUSH BARRIERS CAN BE IMPLEMENTED.
10. WORK SHALL ONLY BE PREFORMED ON THE RIGHT DESCENDING BANK OF THE RIVER.
11. WOODY DEBRIS IS TO BE BURNED ON SITE.
12. CLEARING AND GRUBBING SHALL BE KEPT TO A MINIMUM ONLY PERFORM WHAT IS NECESSARY TO PERFORM THE WORK.

REFERENCES:

1. FOR GENERAL SPOIL BANK GAP TYPICAL DETAIL, SEE SHEET C-501.
2. FOR STORM WATER POLLUTION PREVENTION PLAN - TYPICAL DETAILS, SEE SHEET C-502.

LEGEND:

- CHANNEL EXCAVATE
- WORKING AREA
- SPOIL BANK
- GAP

A1 COMPLETED SITE CONDITIONS - CHANNEL MAINTENANCE - STA. 0+00 TO STA. 63+00
SCALE: 1"=100'

0 100 200 Feet

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

ISSUE DATE: SEPTEMBER 2024
SOLICITATION NO.: XXXXXX-XX-X-XXXX
CONTRACT NO.: XXXXXX-XX-X-XXXX

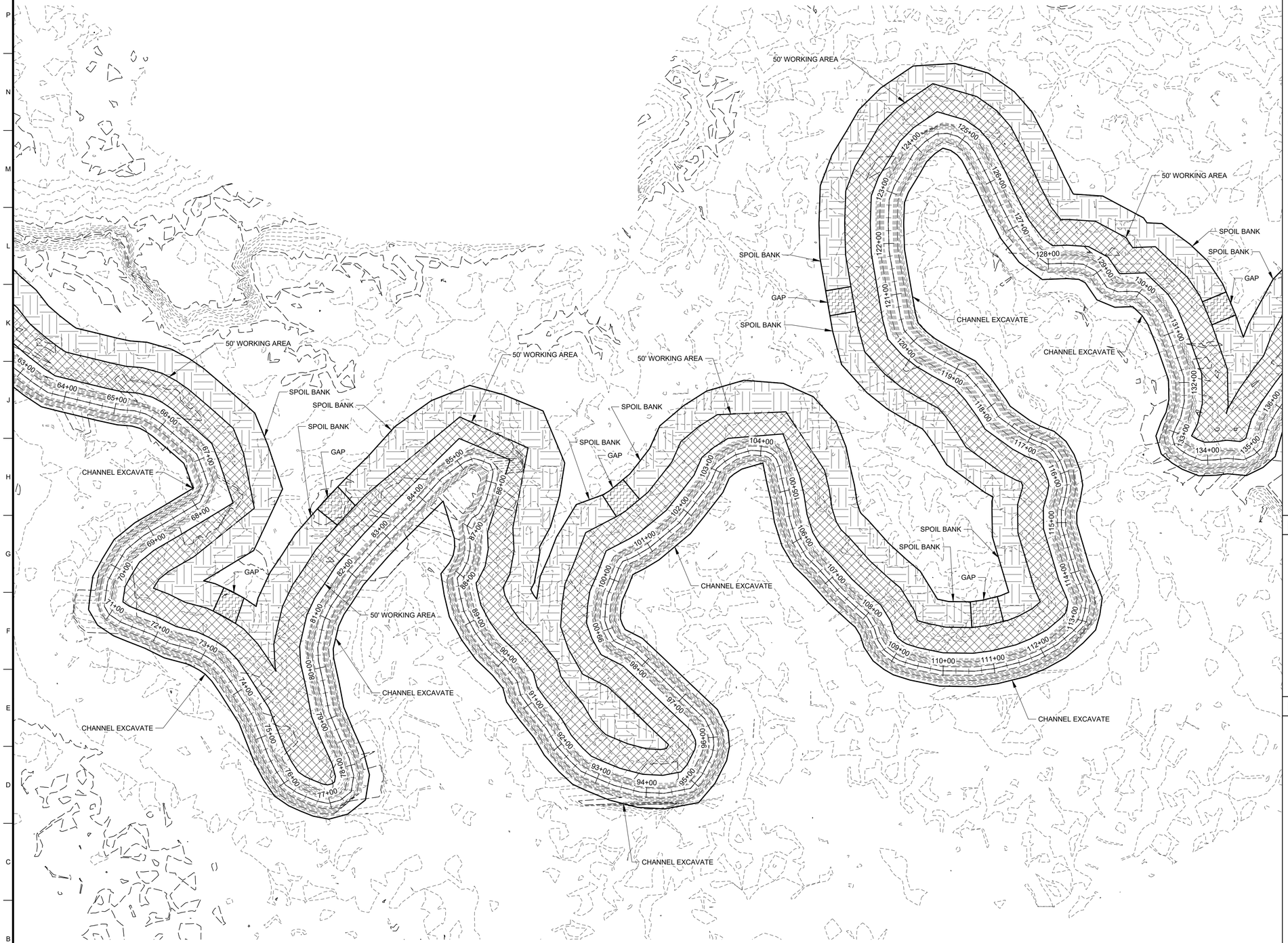
DESIGNED BY: N. MORROW
DRAWN BY: N. MORROW
CHECKED BY: B. GRIFFIN
QA/QC BY: DAVID L. WALLACE, P.E.
SIZE: ANSI D

U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
4CME-SECTION
VICKSBURG, MS

CALHOUN COUNTY, MS
YALOBUSHA RIVER CHANNEL MAINTENANCE
FC/MRT, YAZOO RIVER BASIN
YALOBUSHA RIVER WATERSHED

COMPLETED SITE CONDITIONS
CHANNEL MAINTENANCE
STA. 0+00 TO STA. 63+00

SHEET ID
C-113



A1 COMPLETED SITE CONDITIONS - CHANNEL MAINTENANCE - STA. 63+00 TO STA. 136+00

SCALE: 1"=100'

0 100 200 Feet

NOTES:

1. EXISTING GROUND SURVEY DATA WAS COLLECTED IN 2023.
2. MISSISSIPPI STATE PLANE COORDINATES EAST ZONE (2011) NAD83 (2017). ELEVATIONS IN FEET, NAVD88.
3. FOR CENTERLINE PROFILE OF THE YALOBUSHA RIVER, SEE SHEET C-201 TO C-20X.
4. GAPS SHALL BE LEFT IN THE DISPOSAL AREAS AT ALL EXISTING DRAINS, TRIBUTARY DITCHES, STREAMS, EXISTING GAPS, AND AT ADDITIONAL INTERVALS AS NECESSARY, BUT NOT TO EXCEED 1500 FEET, SO AS NOT TO IMPOUND WATER BEHIND THE DISPOSAL ARES, UNLESS OTHERWISE APPROVED.
5. ALL CLEANING OPERATIONS SHALL BE CONDUCTED IN A MANNER TO PREVENT ANY CLEARED MATERIALS FROM ENTERING THE STREAM CHANNEL.
6. A SMOOTH TRANSITION FOR CHANGES IN THE SIDE SLOPES SHALL BE PROVIDED AT THE DOWNSTREAM AND UPSTREAM ENDS OF THE WORK.
7. THE EXCAVATED MATERIAL SHALL BE SPREAD, COMPACTED, AND EROSION CONTROL APPLIED.
8. IN ACCORDANCE WITH SHEET C-502 HAY WATTLES SHALL BE PLACED AT ALL GAPS IN THE SPOIL BANK.
9. IN ACCORDANCE WITH SHEET C-502 SILT FENCE SHALL BE PLACED THE LENGTH OF THE ENTIRE PROJECT, EXCEPT IN AREAS WHERE BRUSH BARRIERS CAN BE IMPLEMENTED.
10. WORK SHALL ONLY BE PREFORMED ON THE RIGHT DESCENDING BANK OF THE RIVER.
11. WOODY DEBRIS IS TO BE BURNED ON SITE.
12. CLEARING AND GRUBBING SHALL BE KEPT TO A MINIMUM ONLY PERFORM WHAT IS NECESSARY TO PERFORM THE WORK.

REFERENCES:

1. FOR GENERAL SPOIL BANK GAP TYPICAL DETAIL, SEE SHEET C-501.
2. FOR STORM WATER POLLUTION PREVENTION PLAN - TYPICAL DETAILS, SEE SHEET C-502.

LEGEND:

- CHANNEL EXCAVATE
- WORKING AREA
- SPOIL BANK
- GAP

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

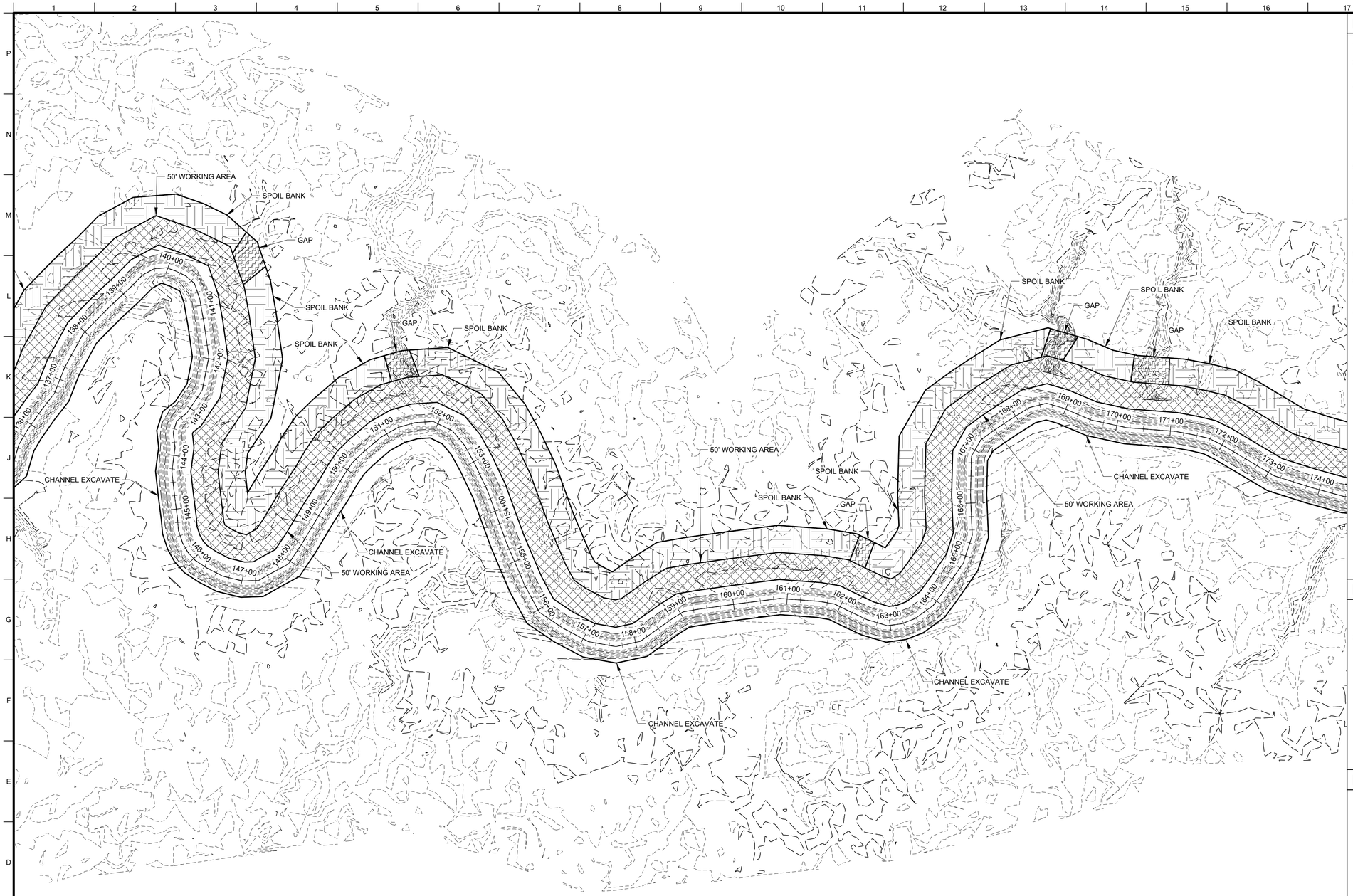
DESIGNED BY: N. MORROW
DRAWN BY: N. MORROW
CHECKED BY: B. GRIFFIN
SUBMITTED BY: DAVID L. WALLACE, P.E.
SIZE: ANSI D
ISSUE DATE: SEPTEMBER 2024
SOLICITATION NO.: XXXXXX-XX-X-XXXX
CONTRACT NO.: XXXXXX-XX-X-XXXX

U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
ACME SECTION
VICKSBURG, MS

CALHOUN COUNTY, MS
YALOBUSHA RIVER CHANNEL MAINTENANCE
FC/MR&T, YAZOO RIVER BASIN
YALOBUSHA RIVER WATERSHED

COMPLETED SITE CONDITIONS CHANNEL MAINTENANCE STA. 63+00 TO STA. 136+00

SHEET ID
C-114



NOTES:

1. EXISTING GROUND SURVEY DATA WAS COLLECTED IN 2023.
2. MISSISSIPPI STATE PLANE COORDINATES EAST ZONE (2011) NAD83 (2017). ELEVATIONS IN FEET, NAVD88.
3. FOR CENTERLINE PROFILE OF THE YALOBUSHA RIVER, SEE SHEET C-201 TO C-20X.
4. GAPS SHALL BE LEFT IN THE DISPOSAL AREAS AT ALL EXISTING DRAINS, TRIBUTARY DITCHES, STREAMS, EXISTING GAPS, AND AT ADDITIONAL INTERVALS AS NECESSARY, BUT NOT TO EXCEED 1500 FEET, SO AS NOT TO IMPOUND WATER BEHIND THE DISPOSAL ARES, UNLESS OTHERWISE APPROVED.
5. ALL CLEANING OPERATIONS SHALL BE CONDUCTED IN A MANNER TO PREVENT ANY CLEARED MATERIALS FROM ENTERING THE STREAM CHANNEL.
6. A SMOOTH TRANSITION FOR CHANGES IN THE SIDE SLOPES SHALL BE PROVIDED AT THE DOWNSTREAM AND UPSTREAM ENDS OF THE WORK.
7. THE EXCAVATED MATERIAL SHALL BE SPREAD, COMPACTED, AND EROSION CONTROL APPLIED.
8. IN ACCORDANCE WITH SHEET C-502 HAY WATTLES SHALL BE PLACED AT ALL GAPS IN THE SPOIL BANK.
9. IN ACCORDANCE WITH SHEET C-502 SILT FENCE SHALL BE PLACED THE LENGTH OF THE ENTIRE PROJECT, EXCEPT IN AREAS WHERE BRUSH BARRIERS CAN BE IMPLEMENTED.
10. WORK SHALL ONLY BE PREFORMED ON THE RIGHT DESCENDING BANK OF THE RIVER.
11. WOODY DEBRIS IS TO BE BURNED ON SITE.
12. CLEARING AND GRUBBING SHALL BE KEPT TO A MINIMUM ONLY PERFORM WHAT IS NECESSARY TO PERFORM THE WORK.

REFERENCES:

1. FOR GENERAL SPOIL BANK GAP TYPICAL DETAIL, SEE SHEET C-501.
2. FOR STORM WATER POLLUTION PREVENTION PLAN - TYPICAL DETAILS, SEE SHEET C-502.

LEGEND:

- CHANNEL EXCAVATE
- WORKING AREA
- SPOIL BANK
- GAP

N

0 100 200 Feet

A1 COMPLETED SITE CONDITIONS - CHANNEL MAINTENANCE - STA.136+00 TO STA. 174+00

SCALE: 1"=100'

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

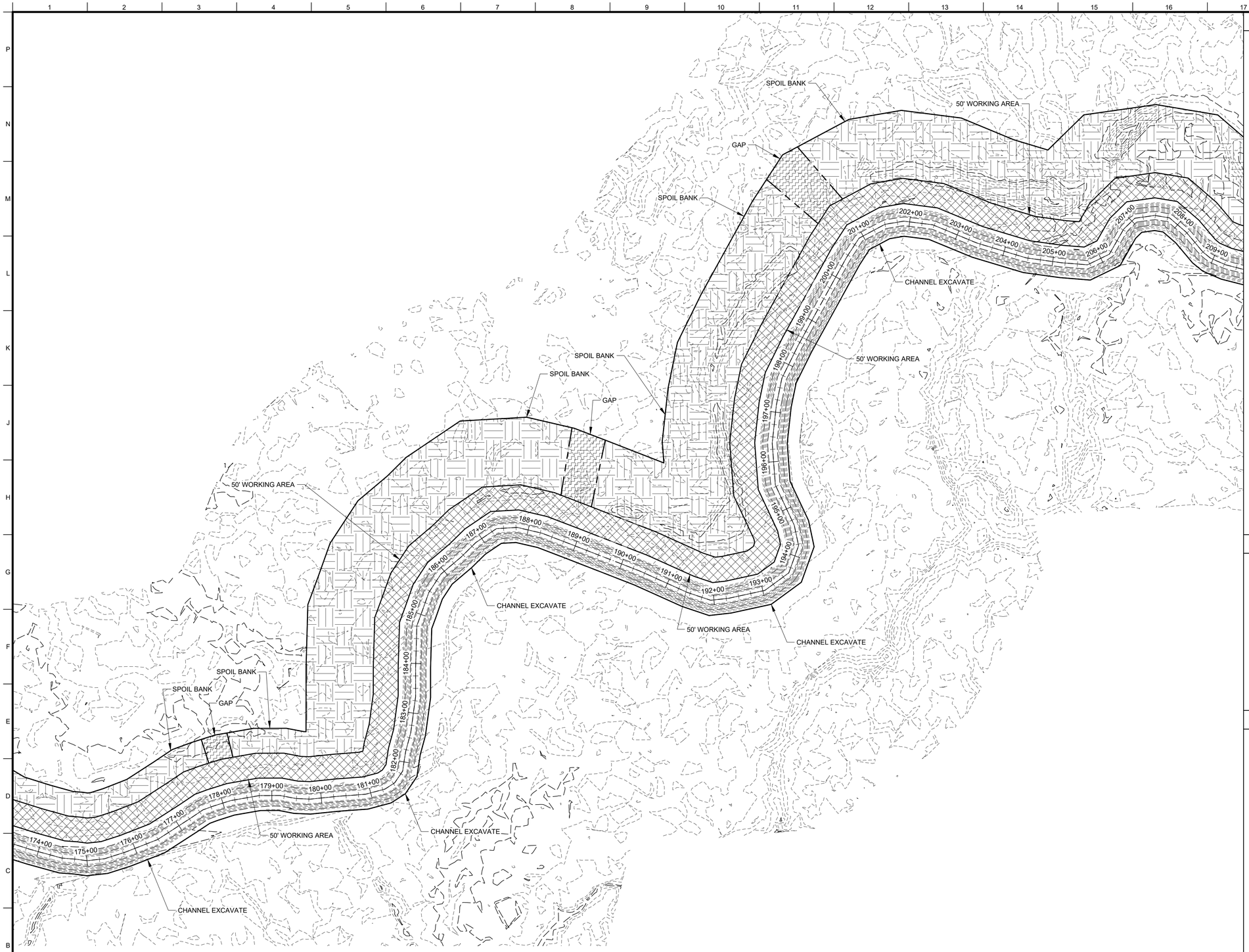
DESIGNED BY: N. MORROW
DRAWN BY: N. MORROW
CHECKED BY: B. GRIFFIN
SUBMITTED BY: DAVID L. WALLACE, P.E.
SIZE: ANSI D
ISSUE DATE: SEPTEMBER 2024
SOLICITATION NO.: XXXXXX-XX-X-XXXX
CONTRACT NO.: XXXXXX-XX-X-XXXX

U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
ADME SECTION
VICKSBURG, MS

CALHOUN COUNTY, MS
YALOBUSHA RIVER CHANNEL MAINTENANCE
FCMP&T YAZOO RIVER BASIN
YALOBUSHA RIVER WATERSHED

COMPLETED SITE CONDITIONS
CHANNEL MAINTENANCE
STA. 136+00 TO STA. 174+00

SHEET ID
C-115



A1 COMPLETED SITE CONDITIONS - CHANNEL MAINTENANCE - STA. 174+00 TO STA. 209+00

SCALE: 1"=100'

NOTES:

1. EXISTING GROUND SURVEY DATA WAS COLLECTED IN 2023.
2. MISSISSIPPI STATE PLANE COORDINATES EAST ZONE (2011) NAD83 (2017). ELEVATIONS IN FEET, NAVD88.
3. FOR CENTERLINE PROFILE OF THE YALOBUSHA RIVER, SEE SHEET C-201 TO C-20X.
4. GAPS SHALL BE LEFT IN THE DISPOSAL AREAS AT ALL EXISTING DRAINS, TRIBUTARY DITCHES, STREAMS, EXISTING GAPS, AND AT ADDITIONAL INTERVALS AS NECESSARY, BUT NOT TO EXCEED 1500 FEET, SO AS NOT TO IMPOUND WATER BEHIND THE DISPOSAL ARES, UNLESS OTHERWISE APPROVED.
5. ALL CLEANING OPERATIONS SHALL BE CONDUCTED IN A MANNER TO PREVENT ANY CLEARED MATERIALS FROM ENTERING THE STREAM CHANNEL.
6. A SMOOTH TRANSITION FOR CHANGES IN THE SIDE SLOPES SHALL BE PROVIDED AT THE DOWNSTREAM AND UPSTREAM ENDS OF THE WORK.
7. THE EXCAVATED MATERIAL SHALL BE SPREAD, COMPACTED, AND EROSION CONTROL APPLIED.
8. IN ACCORDANCE WITH SHEET C-502 HAY WATTLES SHALL BE PLACED AT ALL GAPS IN THE SPOIL BANK.
9. IN ACCORDANCE WITH SHEET C-502 SILT FENCE SHALL BE PLACED THE LENGTH OF THE ENTIRE PROJECT, EXCEPT IN AREAS WHERE BRUSH BARRIERS CAN BE IMPLEMENTED.
10. WORK SHALL ONLY BE PREFORMED ON THE RIGHT DESCENDING BANK OF THE RIVER.
11. WOODY DEBRIS IS TO BE BURNED ON SITE.
12. CLEARING AND GRUBBING SHALL BE KEPT TO A MINIMUM ONLY PERFORM WHAT IS NECESSARY TO PERFORM THE WORK.

REFERENCES:

1. FOR GENERAL SPOIL BANK GAP TYPICAL DETAIL, SEE SHEET C-501.
2. FOR STORM WATER POLLUTION PREVENTION PLAN - TYPICAL DETAILS, SEE SHEET C-502.

LEGEND:

- CHANNEL EXCAVATE
- WORKING AREA
- SPOIL BANK
- GAP

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

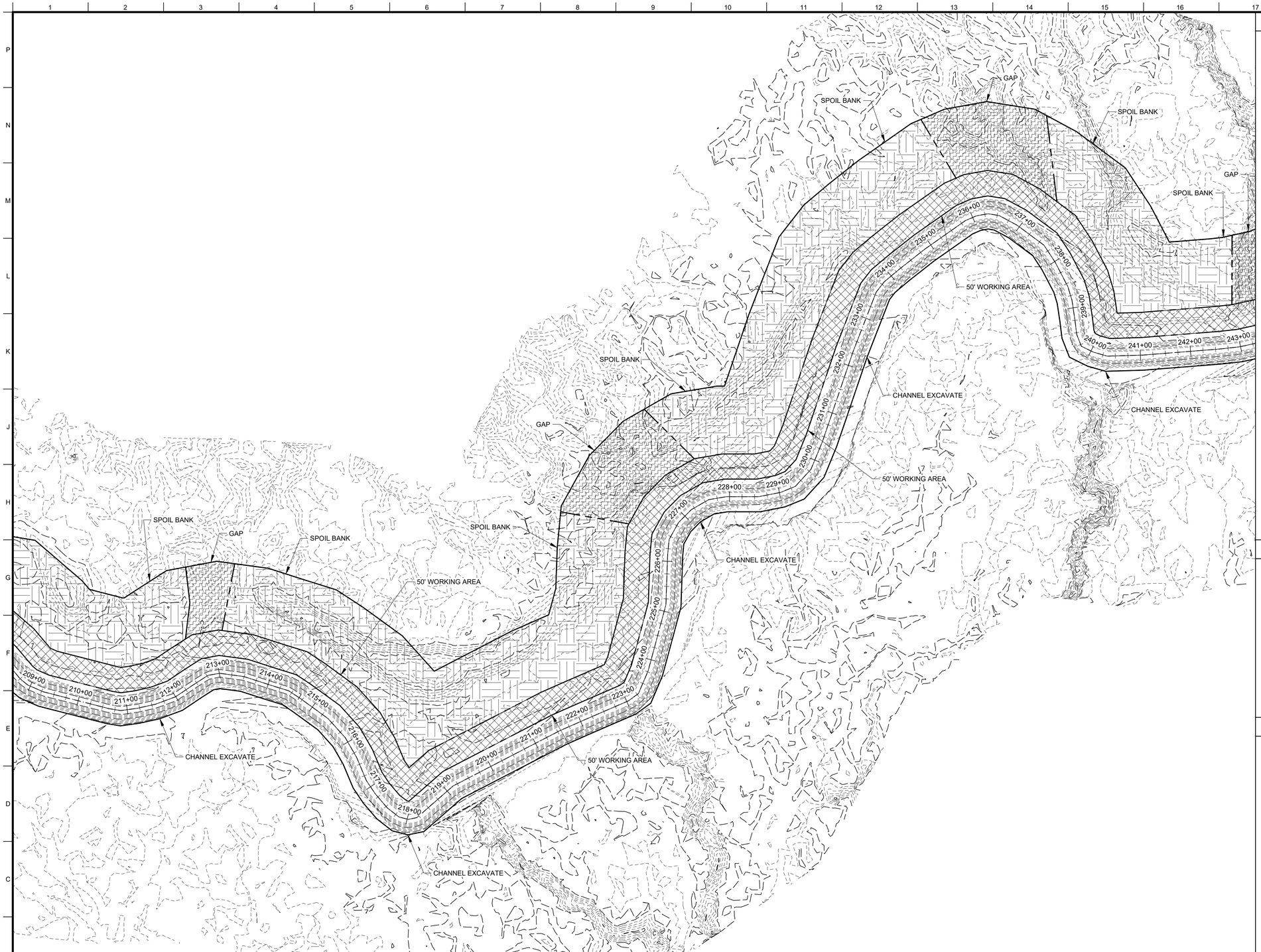
DESIGNED BY: N. MORROW
DRAWN BY: N. MORROW
CHECKED BY: B. GRIFFIN
SUBMITTED BY: DAVID L. WALLACE, P.E.
SIZE: ANSI D
ISSUE DATE: SEPTEMBER 2024
SOLICITATION NO.: XXXXXX-XX-X-XXXX
CONTRACT NO.: XXXXXX-XX-X-XXXX

U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
ADME SECTION
VICKSBURG, MS

CALHOUN COUNTY, MS
YALOBUSHA RIVER CHANNEL MAINTENANCE
FCMP&F YAZOO RIVER BASIN
YALOBUSHA RIVER WATERSHED

COMPLETED SITE CONDITIONS
CHANNEL MAINTENANCE
STA. 174+00 TO STA. 209+00

SHEET ID
C-116



A1 COMPLETED SITE CONDITIONS - CHANNEL MAINTENANCE - STA. 209+00 TO STA. 243+00

SCALE: 1"=100'

NOTES:

1. EXISTING GROUND SURVEY DATA WAS COLLECTED IN 2023.
2. MISSISSIPPI STATE PLANE COORDINATES EAST ZONE (2011) NAD83 (2017). ELEVATIONS IN FEET, NAVD88.
3. FOR CENTERLINE PROFILE OF THE YALOBUSHA RIVER, SEE SHEET C-201 TO C-20X.
4. GAPS SHALL BE LEFT IN THE DISPOSAL AREAS AT ALL EXISTING DRAINS, TRIBUTARY DITCHES, STREAMS, EXISTING GAPS, AND AT ADDITIONAL INTERVALS AS NECESSARY, BUT NOT TO EXCEED 1500 FEET, SO AS NOT TO IMPOUND WATER BEHIND THE DISPOSAL ARES, UNLESS OTHERWISE APPROVED.
5. ALL CLEANING OPERATIONS SHALL BE CONDUCTED IN A MANNER TO PREVENT ANY CLEARED MATERIALS FROM ENTERING THE STREAM CHANNEL.
6. A SMOOTH TRANSITION FOR CHANGES IN THE SIDE SLOPES SHALL BE PROVIDED AT THE DOWNSTREAM AND UPSTREAM ENDS OF THE WORK.
7. THE EXCAVATED MATERIAL SHALL BE SPREAD, COMPACTED, AND EROSION CONTROL APPLIED.
8. IN ACCORDANCE WITH SHEET C-502 HAY WATTLES SHALL BE PLACED AT ALL GAPS IN THE SPOIL BANK.
9. IN ACCORDANCE WITH SHEET C-502 SILT FENCE SHALL BE PLACED THE LENGTH OF THE ENTIRE PROJECT, EXCEPT IN AREAS WHERE BRUSH BARRIERS CAN BE IMPLEMENTED.
10. WORK SHALL ONLY BE PREFORMED ON THE RIGHT DESCENDING BANK OF THE RIVER.
11. WOODY DEBRIS IS TO BE BURNED ON SITE.
12. CLEARING AND GRUBBING SHALL BE KEPT TO A MINIMUM ONLY PERFORM WHAT IS NECESSARY TO PERFORM THE WORK.

REFERENCES:

1. FOR GENERAL SPOIL BANK GAP TYPICAL DETAIL, SEE SHEET C-501.
2. FOR STORM WATER POLLUTION PREVENTION PLAN - TYPICAL DETAILS, SEE SHEET C-502.

LEGEND:

- CHANNEL EXCAVATE
- WORKING AREA
- SPOIL BANK
- GAP

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

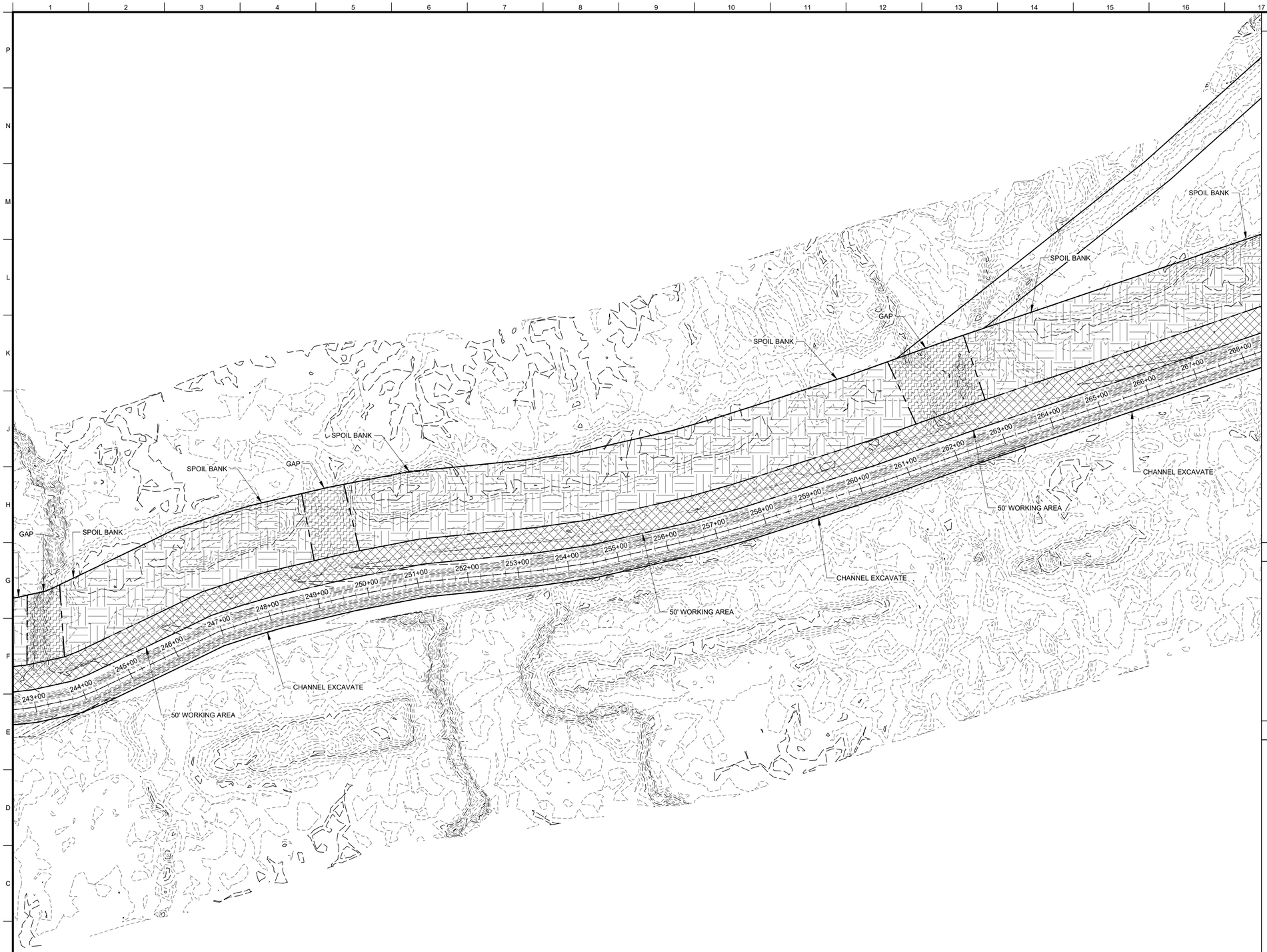
DESIGNED BY: N. MORROW
DRAWN BY: N. MORROW
CHECKED BY: B. GRIFFITH
QUALITY CHECKED BY: DAVID L. WALLACE, P.E.
SIZE: ANSI D
ISSUE DATE: SEPTEMBER 2024
SOLICITATION NO.: XXXXXX-XX-X-XXXX
CONTRACT NO.: XXXXXX-XX-X-XXXX

U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
ACME SECTION
VICKSBURG, MS

CALHOUN COUNTY, MS
YALOBUSHA RIVER CHANNEL MAINTENANCE
FC/MRAT, YAZOO RIVER BASIN
YALOBUSHA RIVER WATERSHED

COMPLETED SITE CONDITIONS CHANNEL MAINTENANCE STA. 209+00 TO STA. 243+00

SHEET ID
C-117



A1 COMPLETED SITE CONDITIONS - CHANNEL MAINTENANCE - STA. 243+00 TO STA. 268+00

SCALE: 1"=100'

NOTES:

1. EXISTING GROUND SURVEY DATA WAS COLLECTED IN 2023.
2. MISSISSIPPI STATE PLANE COORDINATES EAST ZONE (2011) NAD83 (2017). ELEVATIONS IN FEET, NAVD88.
3. FOR CENTERLINE PROFILE OF THE YALOBUSHA RIVER, SEE SHEET C-201 TO C-20X.
4. GAPS SHALL BE LEFT IN THE DISPOSAL AREAS AT ALL EXISTING DRAINS, TRIBUTARY DITCHES, STREAMS, EXISTING GAPS, AND AT ADDITIONAL INTERVALS AS NECESSARY, BUT NOT TO EXCEED 1500 FEET, SO AS NOT TO IMPOUND WATER BEHIND THE DISPOSAL ARES, UNLESS OTHERWISE APPROVED.
5. ALL CLEANING OPERATIONS SHALL BE CONDUCTED IN A MANNER TO PREVENT ANY CLEARED MATERIALS FROM ENTERING THE STREAM CHANNEL.
6. A SMOOTH TRANSITION FOR CHANGES IN THE SIDE SLOPES SHALL BE PROVIDED AT THE DOWNSTREAM AND UPSTREAM ENDS OF THE WORK.
7. THE EXCAVATED MATERIAL SHALL BE SPREAD, COMPACTED, AND EROSION CONTROL APPLIED.
8. IN ACCORDANCE WITH SHEET C-502 HAY WATTLES SHALL BE PLACED AT ALL GAPS IN THE SPOIL BANK.
9. IN ACCORDANCE WITH SHEET C-502 SILT FENCE SHALL BE PLACED THE LENGTH OF THE ENTIRE PROJECT, EXCEPT IN AREAS WHERE BRUSH BARRIERS CAN BE IMPLEMENTED.
10. WORK SHALL ONLY BE PREFORMED ON THE RIGHT DESCENDING BANK OF THE RIVER.
11. WOODY DEBRIS IS TO BE BURNED ON SITE.
12. CLEARING AND GRUBBING SHALL BE KEPT TO A MINIMUM ONLY PERFORM WHAT IS NECESSARY TO PERFORM THE WORK.

REFERENCES:

1. FOR GENERAL SPOIL BANK GAP TYPICAL DETAIL, SEE SHEET C-501.
2. FOR STORM WATER POLLUTION PREVENTION PLAN - TYPICAL DETAILS, SEE SHEET C-502.

LEGEND:

- CHANNEL EXCAVATE
- WORKING AREA
- SPOIL BANK
- GAP

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

ISSUE DATE: SEPTEMBER 2024
SOLICITATION NO.: XXXXXX-XX-X-XXXX
CONTRACT NO.: XXXXXX-XX-X-XXXX

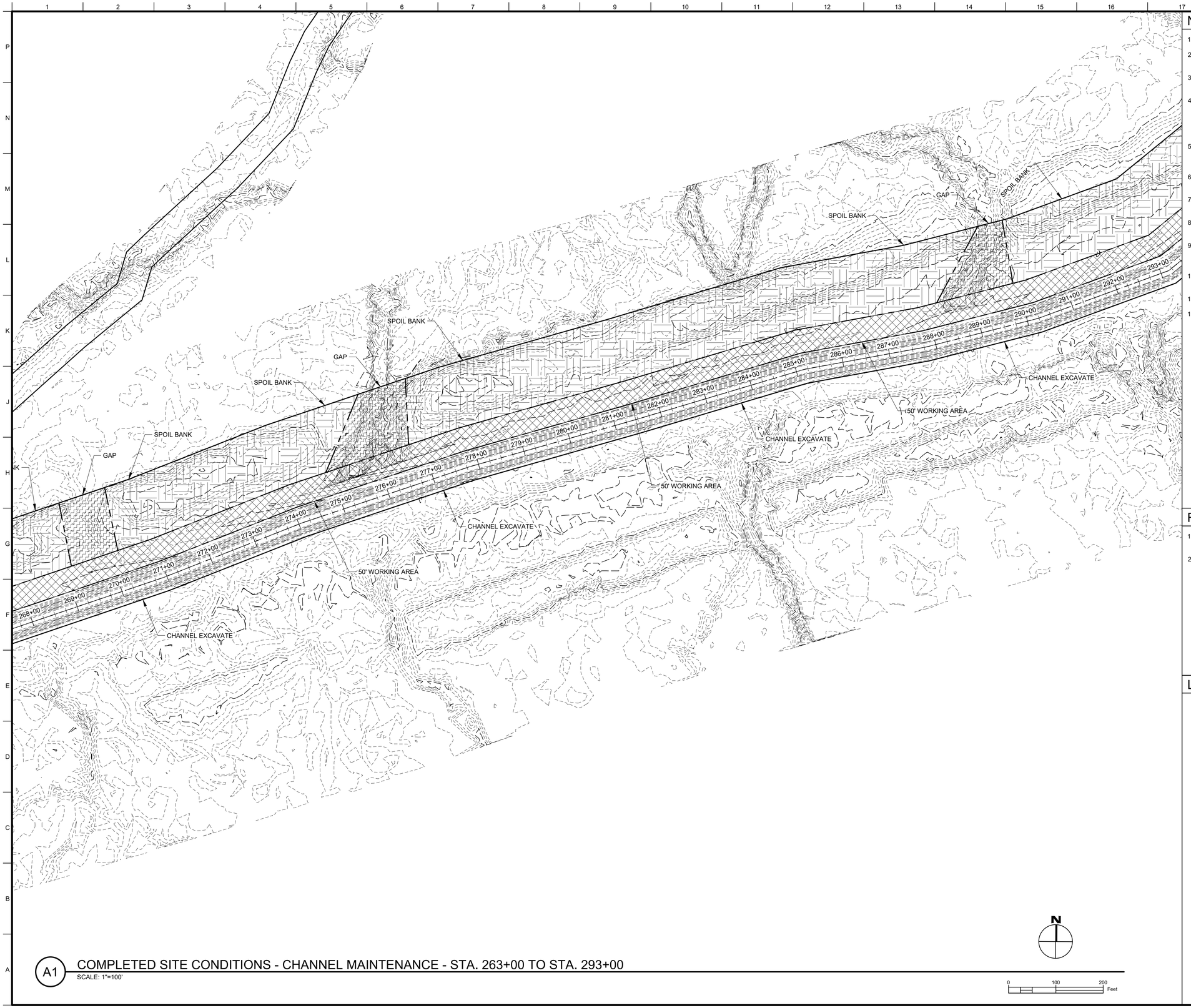
DESIGNED BY: N. MORROW
DRAWN BY: N. MORROW
CHECKED BY: B. GRIFFIN
SUBMITTED BY: DAVID L. WALLACE, P.E.
SIZE: ANSI D

U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
ACME SECTION
VICKSBURG, MS

CALHOUN COUNTY, MS
YALOBUSHA RIVER CHANNEL MAINTENANCE
FC/MR&T, YAZOO RIVER BASIN
YALOBUSHA RIVER WATERSHED

COMPLETED SITE CONDITIONS
CHANNEL MAINTENANCE
STA. 243+00 TO STA. 268+00

SHEET ID
C-118



NOTES:

1. EXISTING GROUND SURVEY DATA WAS COLLECTED IN 2023.
2. MISSISSIPPI STATE PLANE COORDINATES EAST ZONE (2011) NAD83 (2017). ELEVATIONS IN FEET, NAVD88.
3. FOR CENTERLINE PROFILE OF THE YALOBUSHA RIVER, SEE SHEET C-201 TO C-20X.
4. GAPS SHALL BE LEFT IN THE DISPOSAL AREAS AT ALL EXISTING DRAINS, TRIBUTARY DITCHES, STREAMS, EXISTING GAPS, AND AT ADDITIONAL INTERVALS AS NECESSARY, BUT NOT TO EXCEED 1500 FEET, SO AS NOT TO IMPOUND WATER BEHIND THE DISPOSAL ARES, UNLESS OTHERWISE APPROVED.
5. ALL CLEANING OPERATIONS SHALL BE CONDUCTED IN A MANNER TO PREVENT ANY CLEARED MATERIALS FROM ENTERING THE STREAM CHANNEL.
6. A SMOOTH TRANSITION FOR CHANGES IN THE SIDE SLOPES SHALL BE PROVIDED AT THE DOWNSTREAM AND UPSTREAM ENDS OF THE WORK.
7. THE EXCAVATED MATERIAL SHALL BE SPREAD, COMPACTED, AND EROSION CONTROL APPLIED.
8. IN ACCORDANCE WITH SHEET C-502 HAY WATTLES SHALL BE PLACED AT ALL GAPS IN THE SPOIL BANK.
9. IN ACCORDANCE WITH SHEET C-502 SILT FENCE SHALL BE PLACED THE LENGTH OF THE ENTIRE PROJECT, EXCEPT IN AREAS WHERE BRUSH BARRIERS CAN BE IMPLEMENTED.
10. WORK SHALL ONLY BE PREFORMED ON THE RIGHT DESCENDING BANK OF THE RIVER.
11. WOODY DEBRIS IS TO BE BURNED ON SITE.
12. CLEARING AND GRUBBING SHALL BE KEPT TO A MINIMUM ONLY PERFORM WHAT IS NECESSARY TO PERFORM THE WORK.

REFERENCES:

1. FOR GENERAL SPOIL BANK GAP TYPICAL DETAIL, SEE SHEET C-501.
2. FOR STORM WATER POLLUTION PREVENTION PLAN - TYPICAL DETAILS, SEE SHEET C-502.

LEGEND:

- CHANNEL EXCAVATE
- WORKING AREA
- SPOIL BANK
- GAP

A1 COMPLETED SITE CONDITIONS - CHANNEL MAINTENANCE - STA. 263+00 TO STA. 293+00
SCALE: 1"=100'

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

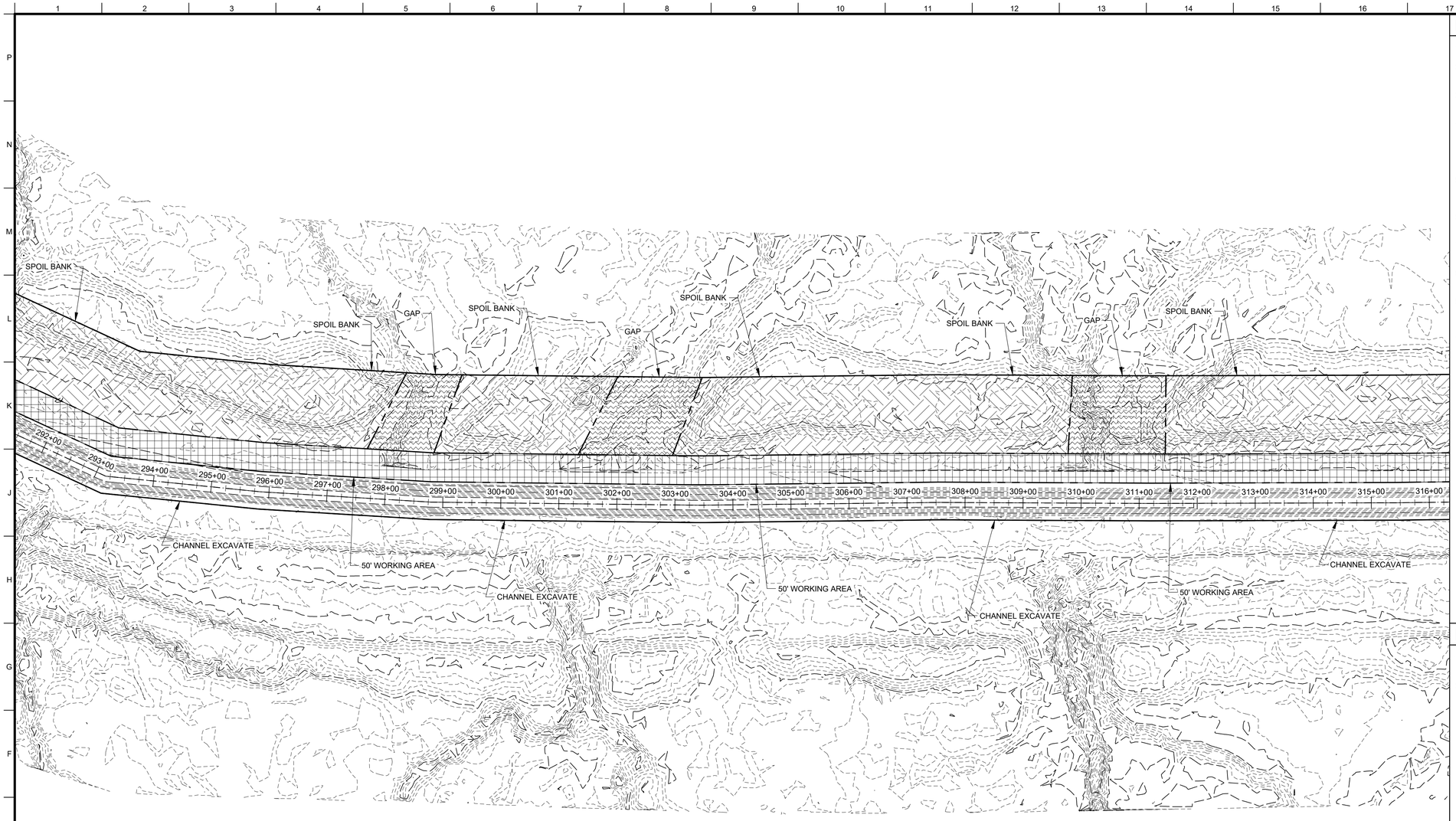
DESIGNED BY: N. MORROW
DRAWN BY: N. MORROW
CHECKED BY: B. GRIFFITH
QUALITY CONTROL BY: DAVID L. WALLACE, P.E.
SIZE: ANSI D
ISSUE DATE: SEPTEMBER 2024
SOLICITATION NO.: XXXXXX-XX-X-XXXX
CONTRACT NO.: XXXXXX-XX-X-XXXX

U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
ACME SECTION
VICKSBURG, MS

CALHOUN COUNTY, MS
YALOBUSHA RIVER CHANNEL MAINTENANCE
FC/MR&T YAZOO RIVER BASIN
YALOBUSHA RIVER WATERSHED

COMPLETED SITE CONDITIONS
CHANNEL MAINTENANCE
STA. 268+00 TO STA. 293+00

SHEET ID
C-119



A1 COMPLETED SITE CONDITIONS - CHANNEL MAINTENANCE - STA. 293+00 TO STA. 316+00

SCALE: 1"=100'

0 100 200 Feet

NOTES:

1. EXISTING GROUND SURVEY DATA WAS COLLECTED IN 2023.
2. MISSISSIPPI STATE PLANE COORDINATES EAST ZONE (2011) NAD83 (2017). ELEVATIONS IN FEET, NAVD88.
3. FOR CENTERLINE PROFILE OF THE YALOBUSHA RIVER, SEE SHEET C-201 TO C-20X.
4. GAPS SHALL BE LEFT IN THE DISPOSAL AREAS AT ALL EXISTING DRAINS, TRIBUTARY DITCHES, STREAMS, EXISTING GAPS, AND AT ADDITIONAL INTERVALS AS NECESSARY, BUT NOT TO EXCEED 1500 FEET, SO AS NOT TO IMPOUND WATER BEHIND THE DISPOSAL ARES, UNLESS OTHERWISE APPROVED.
5. ALL CLEANING OPERATIONS SHALL BE CONDUCTED IN A MANNER TO PREVENT ANY CLEARED MATERIALS FROM ENTERING THE STREAM CHANNEL.
6. A SMOOTH TRANSITION FOR CHANGES IN THE SIDE SLOPES SHALL BE PROVIDED AT THE DOWNSTREAM AND UPSTREAM ENDS OF THE WORK.
7. THE EXCAVATED MATERIAL SHALL BE SPREAD, COMPACTED, AND EROSION CONTROL APPLIED.
8. IN ACCORDANCE WITH SHEET C-502 HAY WATTLES SHALL BE PLACED AT ALL GAPS IN THE SPOIL BANK.
9. IN ACCORDANCE WITH SHEET C-502 SILT FENCE SHALL BE PLACED THE LENGTH OF THE ENTIRE PROJECT, EXCEPT IN AREAS WHERE BRUSH BARRIERS CAN BE IMPLEMENTED.
10. WORK SHALL ONLY BE PREFORMED ON THE RIGHT DESCENDING BANK OF THE RIVER.
11. WOODY DEBRIS IS TO BE BURNED ON SITE.
12. CLEARING AND GRUBBING SHALL BE KEPT TO A MINIMUM ONLY PERFORM WHAT IS NECESSARY TO PERFORM THE WORK.

REFERENCES:

1. FOR GENERAL SPOIL BANK GAP TYPICAL DETAIL, SEE SHEET C-501.
2. FOR STORM WATER POLLUTION PREVENTION PLAN - TYPICAL DETAILS, SEE SHEET C-502.

LEGEND:

- CHANNEL EXCAVATE
- WORKING AREA
- SPOIL BANK
- GAP

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: N. MORROW
DRAWN BY: N. MORROW
CHECKED BY: B. GRIFFIN
SUPERVISED BY: DAVID L. WALLACE, P.E.
SIZE: ANSI D

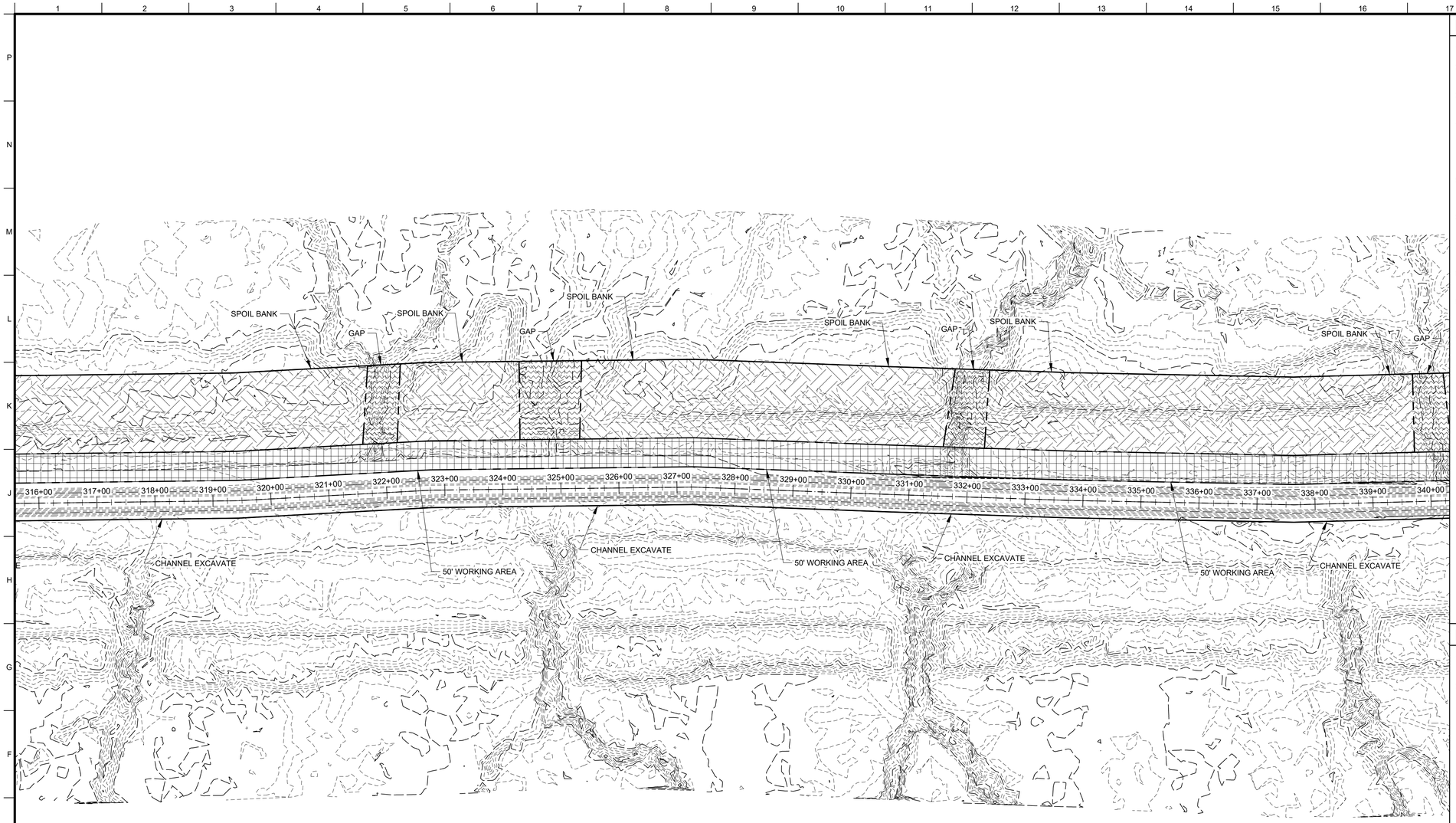
ISSUE DATE: SEPTEMBER 2024
SOLICITATION NO.: XXXXXX-XX-X-XXXX
CONTRACT NO.: XXXXXX-XX-X-XXXX

U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
ADME SECTION
VICKSBURG, MS

CALHOUN COUNTY, MS
YALOBUSHA RIVER CHANNEL MAINTENANCE
FCMR&T YAZOO RIVER BASIN
YALOBUSHA RIVER WATERSHED

COMPLETED SITE CONDITIONS CHANNEL MAINTENANCE STA. 293+00 TO STA. 316+00

SHEET ID
C-120



NOTES:

1. EXISTING GROUND SURVEY DATA WAS COLLECTED IN 2023.
2. MISSISSIPPI STATE PLANE COORDINATES EAST ZONE (2011) NAD83 (2017). ELEVATIONS IN FEET, NAVD88.
3. FOR CENTERLINE PROFILE OF THE YALOBUSHA RIVER, SEE SHEET C-201 TO C-20X.
4. GAPS SHALL BE LEFT IN THE DISPOSAL AREAS AT ALL EXISTING DRAINS, TRIBUTARY DITCHES, STREAMS, EXISTING GAPS, AND AT ADDITIONAL INTERVALS AS NECESSARY, BUT NOT TO EXCEED 1500 FEET, SO AS NOT TO IMPOUND WATER BEHIND THE DISPOSAL ARES, UNLESS OTHERWISE APPROVED.
5. ALL CLEANING OPERATIONS SHALL BE CONDUCTED IN A MANNER TO PREVENT ANY CLEARED MATERIALS FROM ENTERING THE STREAM CHANNEL.
6. A SMOOTH TRANSITION FOR CHANGES IN THE SIDE SLOPES SHALL BE PROVIDED AT THE DOWNSTREAM AND UPSTREAM ENDS OF THE WORK.
7. THE EXCAVATED MATERIAL SHALL BE SPREAD, COMPACTED, AND EROSION CONTROL APPLIED.
8. IN ACCORDANCE WITH SHEET C-502 HAY WATTLES SHALL BE PLACED AT ALL GAPS IN THE SPOIL BANK.
9. IN ACCORDANCE WITH SHEET C-502 SILT FENCE SHALL BE PLACED THE LENGTH OF THE ENTIRE PROJECT, EXCEPT IN AREAS WHERE BRUSH BARRIERS CAN BE IMPLEMENTED.
10. WORK SHALL ONLY BE PREFORMED ON THE RIGHT DESCENDING BANK OF THE RIVER.
11. WOODY DEBRIS IS TO BE BURNED ON SITE.
12. CLEARING AND GRUBBING SHALL BE KEPT TO A MINIMUM ONLY PERFORM WHAT IS NECESSARY TO PERFORM THE WORK.

REFERENCES:

1. FOR GENERAL SPOIL BANK GAP TYPICAL DETAIL, SEE SHEET C-501.
2. FOR STORM WATER POLLUTION PREVENTION PLAN - TYPICAL DETAILS, SEE SHEET C-502.

LEGEND:

- CHANNEL EXCAVATE
- WORKING AREA
- SPOIL BANK
- GAP

A1 COMPLETED SITE CONDITIONS - CHANNEL MAINTENANCE - STA. 316+00 TO STA. 340+00
SCALE: 1"=100'

0 100 200 Feet

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

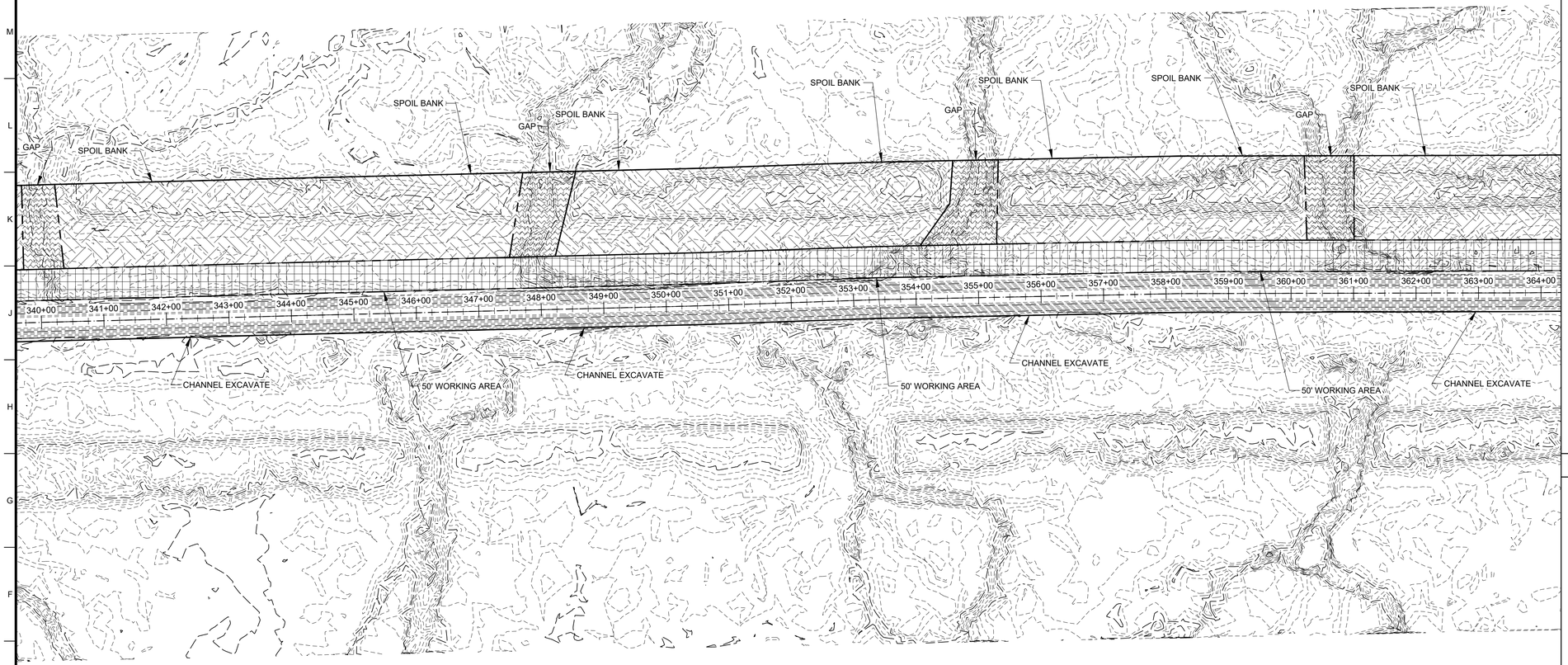
DESIGNED BY: N. MORROW
DRAWN BY: N. MORROW
CHECKED BY: B. GRIFFIN
SUBMITTED BY: DAVID L. WALLACE, P.E.
ISSUE DATE: SEPTEMBER 2024
SOLICITATION NO.: XXXXXX-XX-X-XXXX
CONTRACT NO.: XXXXXX-XX-X-XXXX
SIZE: ANSI D

U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
ACME SECTION
VICKSBURG, MS

CALHOUN COUNTY, MS
YALOBUSHA RIVER CHANNEL MAINTENANCE
FC/MR&T YAZOO RIVER BASIN
YALOBUSHA RIVER WATERSHED

COMPLETED SITE CONDITIONS
CHANNEL MAINTENANCE
STA. 316+00 TO STA. 340+00

SHEET ID
C-121



NOTES:

1. EXISTING GROUND SURVEY DATA WAS COLLECTED IN 2023.
2. MISSISSIPPI STATE PLANE COORDINATES EAST ZONE (2011) NAD83 (2017). ELEVATIONS IN FEET, NAVD88.
3. FOR CENTERLINE PROFILE OF THE YALOBUSHA RIVER, SEE SHEET C-201 TO C-20X.
4. GAPS SHALL BE LEFT IN THE DISPOSAL AREAS AT ALL EXISTING DRAINS, TRIBUTARY DITCHES, STREAMS, EXISTING GAPS, AND AT ADDITIONAL INTERVALS AS NECESSARY, BUT NOT TO EXCEED 1500 FEET, SO AS NOT TO IMPOUND WATER BEHIND THE DISPOSAL ARES, UNLESS OTHERWISE APPROVED.
5. ALL CLEANING OPERATIONS SHALL BE CONDUCTED IN A MANNER TO PREVENT ANY CLEARED MATERIALS FROM ENTERING THE STREAM CHANNEL.
6. A SMOOTH TRANSITION FOR CHANGES IN THE SIDE SLOPES SHALL BE PROVIDED AT THE DOWNSTREAM AND UPSTREAM ENDS OF THE WORK.
7. THE EXCAVATED MATERIAL SHALL BE SPREAD, COMPACTED, AND EROSION CONTROL APPLIED.
8. IN ACCORDANCE WITH SHEET C-502 HAY WATTLES SHALL BE PLACED AT ALL GAPS IN THE SPOIL BANK.
9. IN ACCORDANCE WITH SHEET C-502 SILT FENCE SHALL BE PLACED THE LENGTH OF THE ENTIRE PROJECT, EXCEPT IN AREAS WHERE BRUSH BARRIERS CAN BE IMPLEMENTED.
10. WORK SHALL ONLY BE PREFORMED ON THE RIGHT DESCENDING BANK OF THE RIVER.
11. WOODY DEBRIS IS TO BE BURNED ON SITE.
12. CLEARING AND GRUBBING SHALL BE KEPT TO A MINIMUM ONLY PERFORM WHAT IS NECESSARY TO PERFORM THE WORK.

REFERENCES:

1. FOR GENERAL SPOIL BANK GAP TYPICAL DETAIL, SEE SHEET C-501.
2. FOR STORM WATER POLLUTION PREVENTION PLAN - TYPICAL DETAILS, SEE SHEET C-502.

LEGEND:

- CHANNEL EXCAVATE
- WORKING AREA
- SPOIL BANK
- GAP

A1 COMPLETED SITE CONDITIONS - CHANNEL MAINTENANCE - STA. 340+00 TO STA. 364+00

SCALE: 1"=100'

0 100 200 Feet

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

ISSUE DATE: SEPTEMBER 2024
SOLICITATION NO.: XXXXXX-XX-X-XXXX
CONTRACT NO.: XXXXXX-XX-X-XXXX

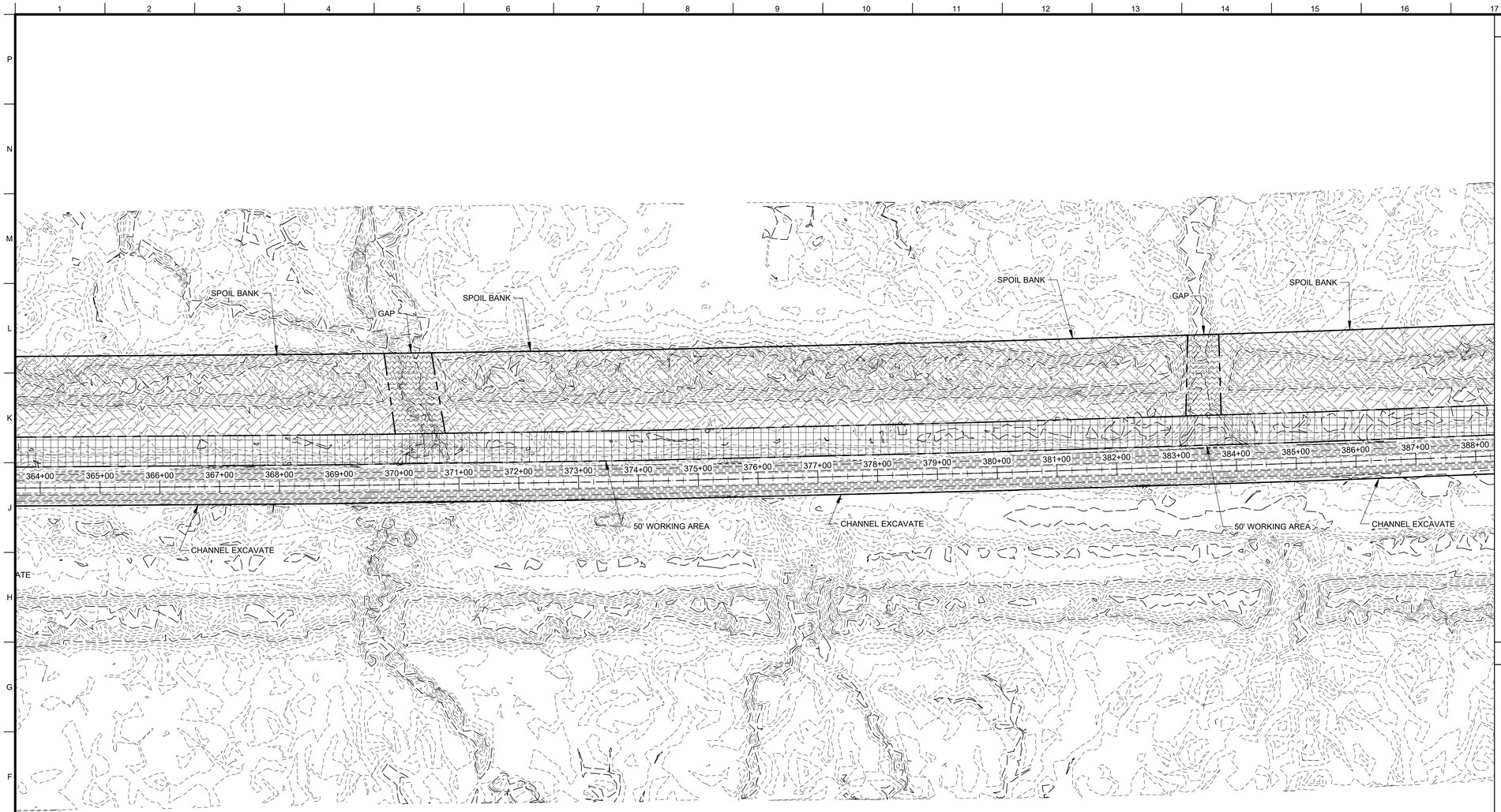
DESIGNED BY: N. MORROW
DRAWN BY: N. MORROW
CHECKED BY: B. GRIFFITH
SUBMITTED BY: DAVID L. WALLACE, P.E.
SIZE: ANSI D

U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
ACME SECTION
VICKSBURG, MS

CALHOUN COUNTY, MS
YALOBUSHA RIVER CHANNEL MAINTENANCE
FC/MRAT, YAZOO RIVER BASIN
YALOBUSHA RIVER WATERSHED

COMPLETED SITE CONDITIONS
CHANNEL MAINTENANCE
STA. 340+00 TO STA. 364+00

SHEET ID
C-122



NOTES:

1. EXISTING GROUND SURVEY DATA WAS COLLECTED IN 2023.
2. MISSISSIPPI STATE PLANE COORDINATES EAST ZONE (2011) NAD83 (2017). ELEVATIONS IN FEET, NAVD88.
3. FOR CENTERLINE PROFILE OF THE YALOBUSHA RIVER, SEE SHEET C-201 TO C-20X.
4. GAPS SHALL BE LEFT IN THE DISPOSAL AREAS AT ALL EXISTING DRAINS, TRIBUTARY DITCHES, STREAMS, EXISTING GAPS, AND AT ADDITIONAL INTERVALS AS NECESSARY, BUT NOT TO EXCEED 1500 FEET, SO AS NOT TO IMPOUND WATER BEHIND THE DISPOSAL ARES, UNLESS OTHERWISE APPROVED.
5. ALL CLEANING OPERATIONS SHALL BE CONDUCTED IN A MANNER TO PREVENT ANY CLEARED MATERIALS FROM ENTERING THE STREAM CHANNEL.
6. A SMOOTH TRANSITION FOR CHANGES IN THE SIDE SLOPES SHALL BE PROVIDED AT THE DOWNSTREAM AND UPSTREAM ENDS OF THE WORK.
7. THE EXCAVATED MATERIAL SHALL BE SPREAD, COMPACTED, AND EROSION CONTROL APPLIED.
8. IN ACCORDANCE WITH SHEET C-502 HAY WATTLES SHALL BE PLACED AT ALL GAPS IN THE SPOIL BANK.
9. IN ACCORDANCE WITH SHEET C-502 SILT FENCE SHALL BE PLACED THE LENGTH OF THE ENTIRE PROJECT, EXCEPT IN AREAS WHERE BRUSH BARRIERS CAN BE IMPLEMENTED.
10. WORK SHALL ONLY BE PREFORMED ON THE RIGHT DESCENDING BANK OF THE RIVER.
11. WOODY DEBRIS IS TO BE BURNED ON SITE.
12. CLEARING AND GRUBBING SHALL BE KEPT TO A MINIMUM ONLY PERFORM WHAT IS NECESSARY TO PERFORM THE WORK.

REFERENCES:

1. FOR GENERAL SPOIL BANK GAP TYPICAL DETAIL, SEE SHEET C-501.
2. FOR STORM WATER POLLUTION PREVENTION PLAN - TYPICAL DETAILS, SEE SHEET C-502.

LEGEND:

- CHANNEL EXCAVATE
- WORKING AREA
- SPOIL BANK
- GAP

A1 COMPLETED SITE CONDITIONS - CHANNEL MAINTENANCE - STA. 364+00 TO STA. 388+00
SCALE: 1"=100'

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

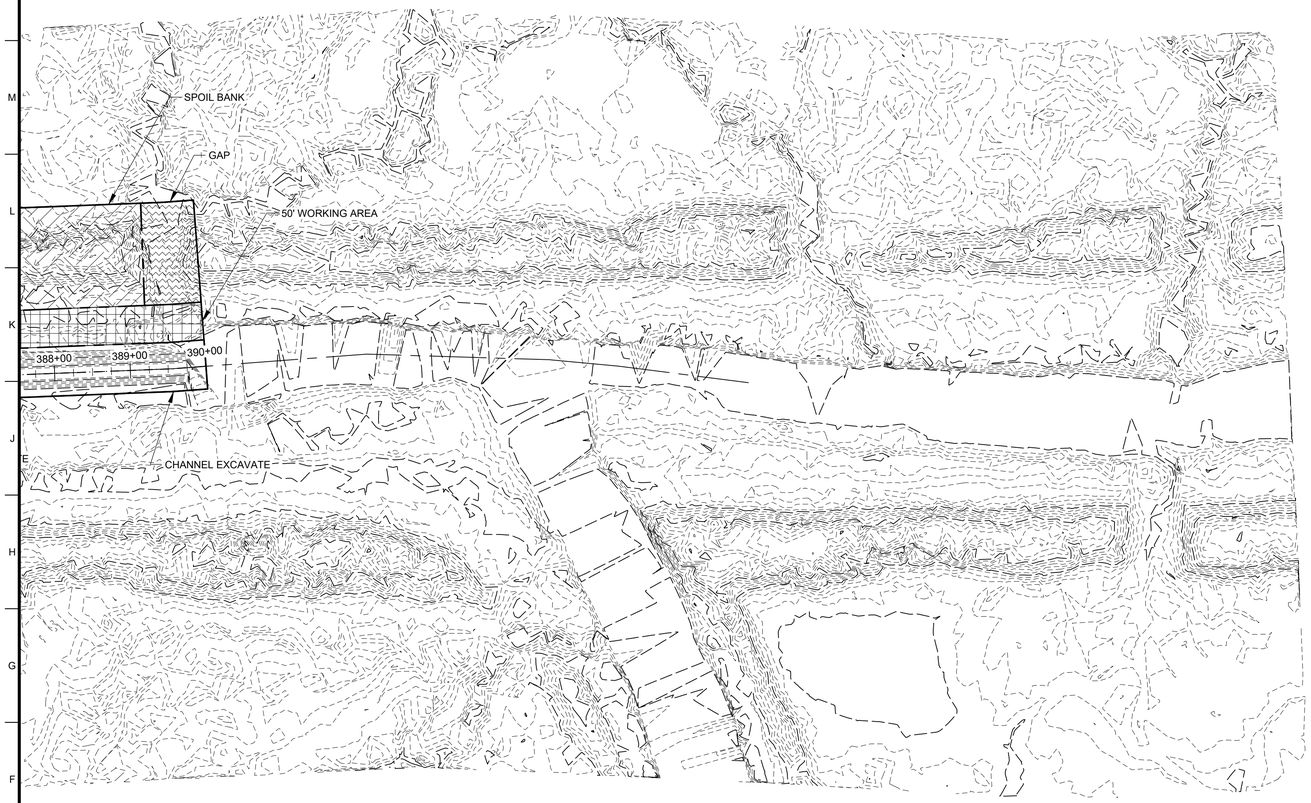
DESIGNED BY: N. MORROW
DRAWN BY: N. MORROW
CHECKED BY: B. GRIFFIN
APPROVED BY: DAVID L. WALLACE, P.E.
SIZE: ANSI D
ISSUE DATE: SEPTEMBER 2024
SOLICITATION NO.: XXXXXX-XX-X-XXXX
CONTRACT NO.: XXXXXX-XX-X-XXXX

U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
ACME SECTION
VICKSBURG, MS

CALHOUN COUNTY, MS
YALOBUSHA RIVER CHANNEL MAINTENANCE
FC/MR&T, YAZOO RIVER BASIN
YALOBUSHA RIVER WATERSHED

COMPLETED SITE CONDITIONS
CHANNEL MAINTENANCE
STA. 364+00 TO STA. 388+00

SHEET ID
C-123



NOTES:

1. EXISTING GROUND SURVEY DATA WAS COLLECTED IN 2023.
2. MISSISSIPPI STATE PLANE COORDINATES EAST ZONE (2011) NAD83 (2017). ELEVATIONS IN FEET, NAVD88.
3. FOR CENTERLINE PROFILE OF THE YALOBUSHA RIVER, SEE SHEET C-201 TO C-20X.
4. GAPS SHALL BE LEFT IN THE DISPOSAL AREAS AT ALL EXISTING DRAINS, TRIBUTARY DITCHES, STREAMS, EXISTING GAPS, AND AT ADDITIONAL INTERVALS AS NECESSARY, BUT NOT TO EXCEED 1500 FEET, SO AS NOT TO IMPOUND WATER BEHIND THE DISPOSAL ARES, UNLESS OTHERWISE APPROVED.
5. ALL CLEANING OPERATIONS SHALL BE CONDUCTED IN A MANNER TO PREVENT ANY CLEARED MATERIALS FROM ENTERING THE STREAM CHANNEL.
6. A SMOOTH TRANSITION FOR CHANGES IN THE SIDE SLOPES SHALL BE PROVIDED AT THE DOWNSTREAM AND UPSTREAM ENDS OF THE WORK.
7. THE EXCAVATED MATERIAL SHALL BE SPREAD, COMPACTED, AND EROSION CONTROL APPLIED.
8. IN ACCORDANCE WITH SHEET C-502 HAY WATTLES SHALL BE PLACED AT ALL GAPS IN THE SPOIL BANK.
9. IN ACCORDANCE WITH SHEET C-502 SILT FENCE SHALL BE PLACED THE LENGTH OF THE ENTIRE PROJECT, EXCEPT IN AREAS WHERE BRUSH BARRIERS CAN BE IMPLEMENTED.
10. WORK SHALL ONLY BE PREFORMED ON THE RIGHT DESCENDING BANK OF THE RIVER.
11. WOODY DEBRIS IS TO BE BURNED ON SITE.
12. CLEARING AND GRUBBING SHALL BE KEPT TO A MINIMUM ONLY PERFORM WHAT IS NECESSARY TO PERFORM THE WORK.

REFERENCES:

1. FOR GENERAL SPOIL BANK GAP TYPICAL DETAIL, SEE SHEET C-501.
2. FOR STORM WATER POLLUTION PREVENTION PLAN - TYPICAL DETAILS, SEE SHEET C-502.

LEGEND:

- CHANNEL EXCAVATE
- WORKING AREA
- SPOIL BANK
- GAP

A1 COMPLETED SITE CONDITIONS - CHANNEL MAINTENANCE - STA. 388+00 TO STA. 390+00
SCALE: 1"=100'

0 100 200 Feet

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

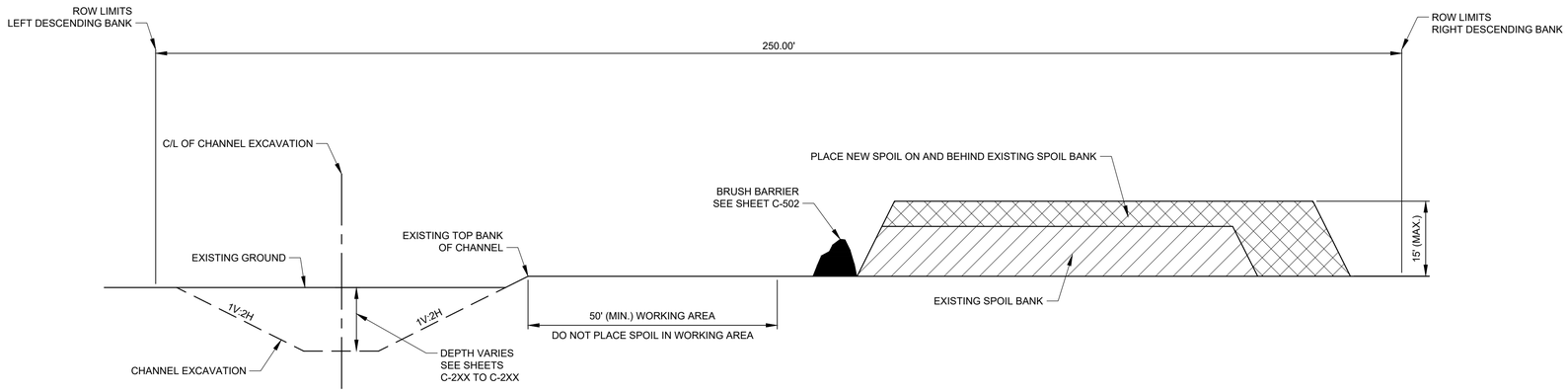
DESIGNED BY: N. MORROW
DRAWN BY: N. MORROW
CHECKED BY: B. GRIFFIN
B. BRITTO BY: DAVID L. WALLACE, P.E.
ISSUE DATE: SEPTEMBER 2024
SOLICITATION NO.: XXXXXX-XX-X-XXXX
CONTRACT NO.: XXXXXX-XX-X-XXXX
SIZE: ANSI D

U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
ACME SECTION
VICKSBURG, MS

CALHOUN COUNTY, MS
YALOBUSHA RIVER CHANNEL MAINTENANCE
FC/MR&T YAZOO RIVER BASIN
YALOBUSHA RIVER WATERSHED

COMPLETED SITE CONDITIONS CHANNEL MAINTENANCE STA. 388+00 TO STA. 390+00

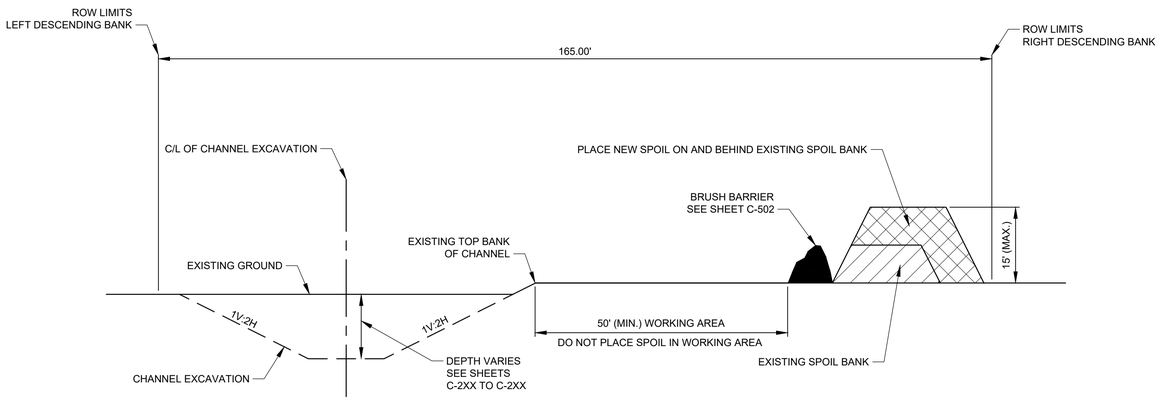
SHEET ID
C-124



H3 TYPICAL CHANNEL CROSS SECTION - STA. 182+50 TO STA. 389+75

SCALE: 1"=15'

0 15 30 Feet



C3 TYPICAL CHANNEL CROSS SECTION - STA. 0+70 TO STA. 182+50

SCALE: 1"=15'

0 15 30 Feet

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

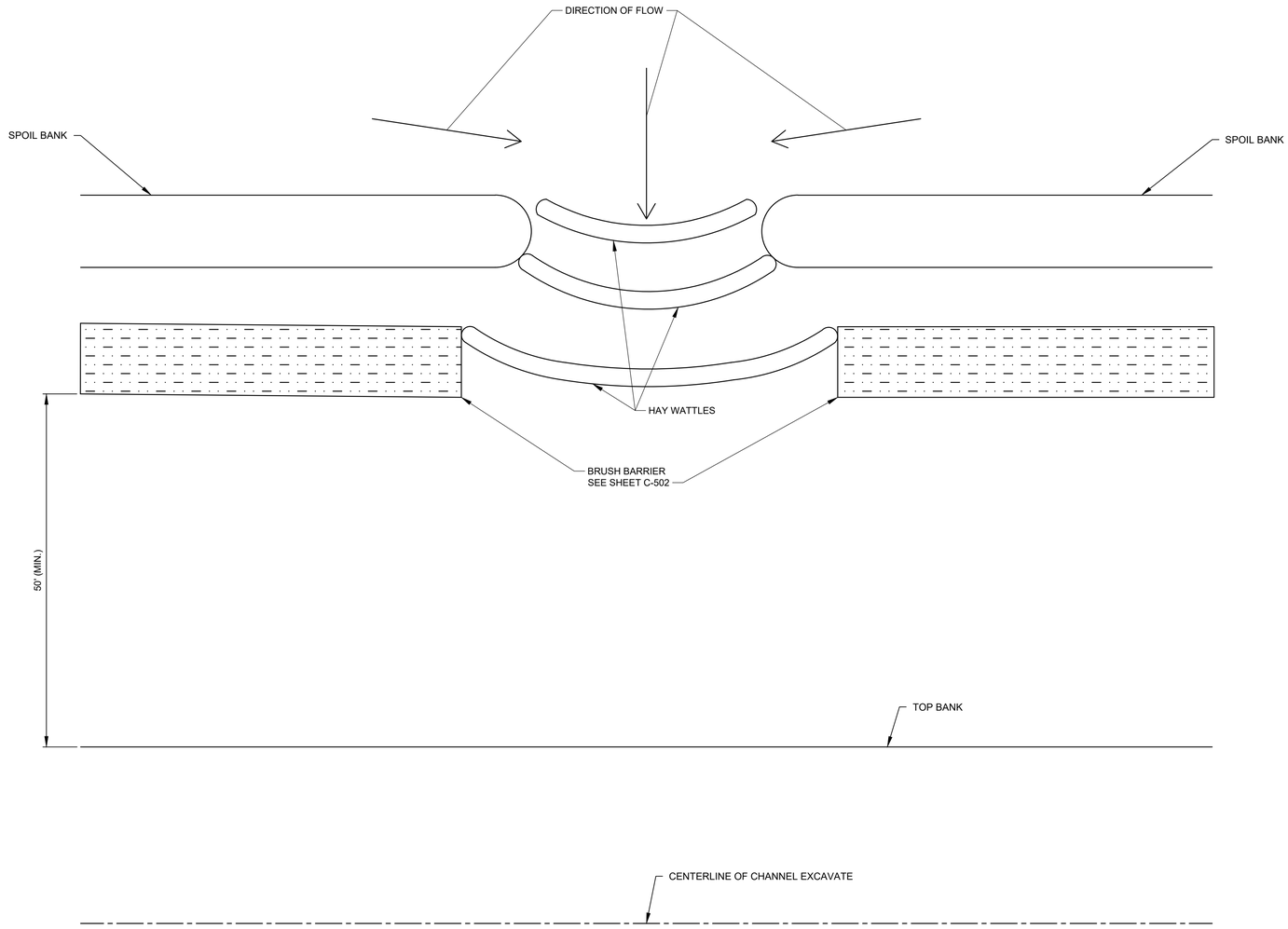
DESIGNED BY: E. SHEPHERD
DRAWN BY: E. SHEPHERD
CHECKED BY: B. GRIFFITH
SUBMITTED BY: DAVID L. WALLACE, P.E.
SIZE: ANSI D
ISSUE DATE: SEPTEMBER 2024
SOLICITATION NO.: XXXXXX-XX-X-XXXX
CONTRACT NO.: XXXXXX-XX-X-XXXX

U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
ACME SECTION
VICKSBURG, MS

CALHOUN COUNTY, MS
YALOBUSHA RIVER CHANNEL MAINTENANCE
FC/MR&T YAZOO RIVER BASIN
YALOBUSHA RIVER WATERSHED

TYPICAL CHANNEL CROSS SECTIONS

SHEET ID
C-301



A1 SPOIL BANK GAP TYPICAL DETAIL
SCALE: NONE

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

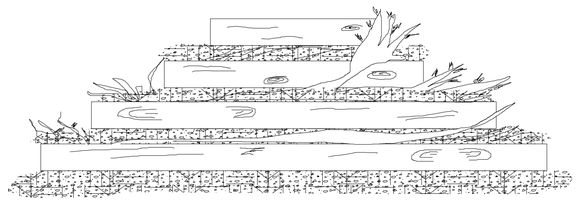
DESIGNED BY:	ISSUE DATE:
E. SHEPHERD	SEPTEMBER 2024
DRAWN BY:	SOLICITATION NO.:
E. SHEPHERD	XXXXXX-XX-X-XXXX
CHECKED BY:	CONTRACT NO.:
B. GRIFFIN	XXXXXX-XX-X-XXXX
SUBMITTED BY:	
DAVID L. WALLACE, P.E.	
SIZE:	
ANSI D	

U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
ACME SECTION
VICKSBURG, MS

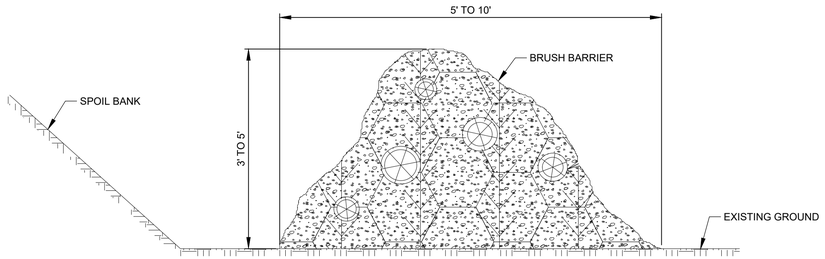
CALHOUN COUNTY, MS
YALOBUSHA RIVER CHANNEL MAINTENANCE
FC/M&T YAZOO RIVER BASIN
YALOBUSHA RIVER WATERSHED

SPOIL BANK GAP TYPICAL DETAIL

SHEET ID
C-501



FRONT ELEVATION



SIDE ELEVATION

F1 BRUSH BARRIER TYPICAL DETAIL

SCALE: NOT TO SCALE

NOTES:

1. BRUSH BARRIER MAY BE USED WHERE NATURAL GROUND IS LEVEL OR SLOPING AWAY FROM PROJECT.
2. PLACE BRUSH, LOG, AND TREE LAPS APPROXIMATELY PARALLEL TO TOE OF FILL SLOPE WITH SOME OF THE HEAVIER MATERIALS BEING PLACED ON TOP TO PROPERLY SECURE THE BARRIER AS DETAILED AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED BY THE CONTRACTING OFFICER.
3. TO ALLOW WATER TO SEEP THROUGH BRUSH BARRIER, INTERMINGLE THE BRUSH, LOG, AND TREE LAPS SO AS NOT TO FORM A SOLID DAM.

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: N. MORROW
DRAWN BY: N. MORROW
CHECKED BY: B. GRIFFITH
SUBMITTED BY: DAVID L. WALLACE, P.E.
SIZE: ANSI D

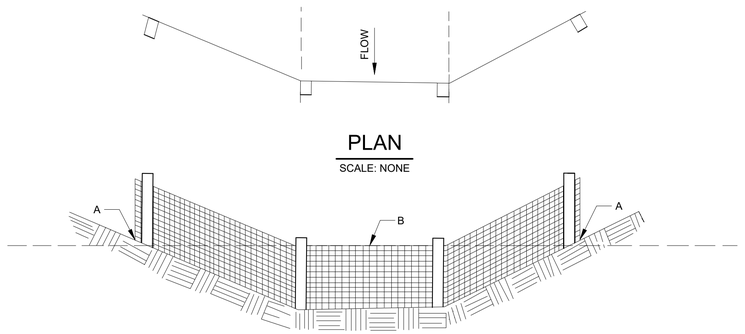
ISSUE DATE: SEPTEMBER 2024
SOLICITATION NO.: XXXXXX-XX-X-XXXX
CONTRACT NO.: XXXXXX-XX-X-XXXX

U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
ACME SECTION
VICKSBURG, MS

CALHOUN COUNTY, MS
YALOBUSHA RIVER CHANNEL MAINTENANCE
FC/M&T YAZOO RIVER BASIN
YALOBUSHA RIVER WATERSHED

BRUSH BARRIER TYPICAL DETAIL

SHEET ID
C-502



PLAN

SCALE: NONE

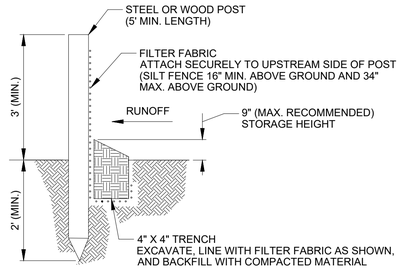
NOTE:

POINTS A SHOULD BE HIGHER THAN POINT B.

ELEVATION

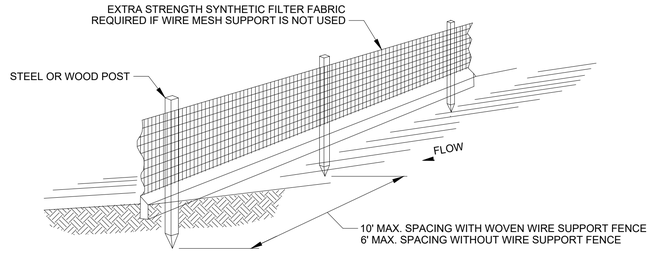
SCALE: NONE

SILT SCREEN FENCE IN DRAINAGE



SECTION

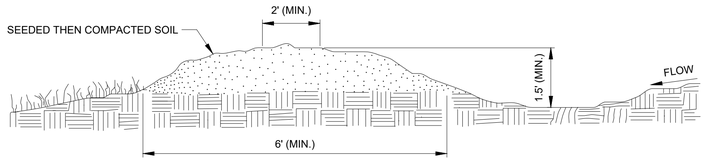
SCALE: NONE



PLAN

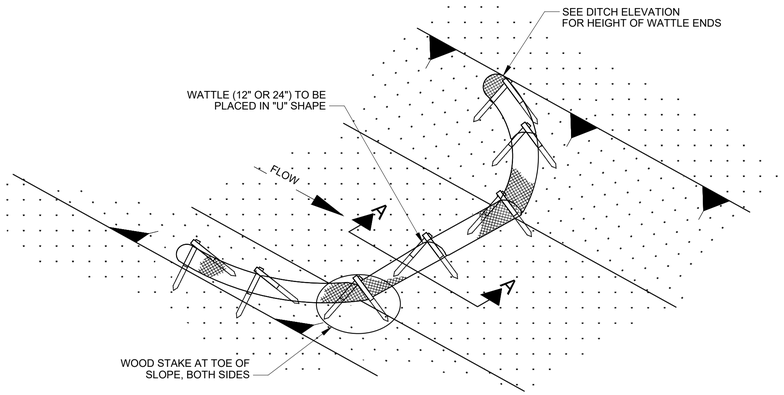
SCALE: NONE

SILT SCREEN FENCE DETAILS



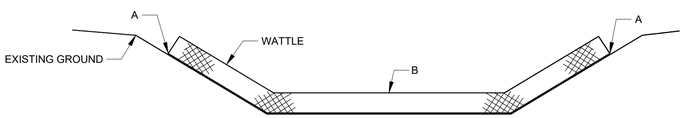
TEMPORARY DIVERSION DIKE DETAIL

SCALE: NONE



DITCH CHECK PLAN

SCALE: NONE

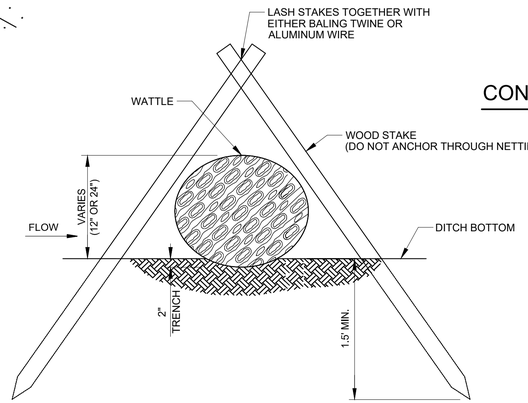


NOTE:

POINTS A SHOULD BE HIGHER THAN POINT B.

DITCH ELEVATION

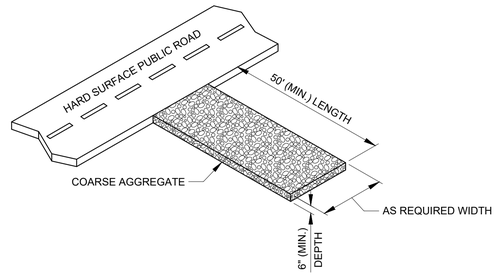
SCALE: NONE



SECTION A-A

SCALE: NONE

HAY WATTLE DETAILS



CONSTRUCTION ENTRANCE AND EXIT DETAIL

SCALE: NONE

NOTES:

1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT SCREEN FENCE SHALL BE PLACED ALONG SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
4. SILT SCREEN FENCE SHALL BE PLACED ALONG TOP BANK OF CREEK PRIOR TO CLEARING AND GRUBBING AND REMAIN IN PLACE UNTIL PERMANENT STABILIZATION PRACTICES ARE STARTED.
5. THE ENVIRONMENTAL PROTECTION CONTROLS SHOWN IN THE CONTRACT DRAWINGS MAY NOT FULLY ADDRESS ALL CONCERNS AND PERMIT REQUIREMENTS, BUT ARE PROVIDED TO ESTABLISH A MINIMUM LEVEL OF PROTECTION REQUIRED AT ALL TIMES. THE CONTRACTOR SHALL CONSIDER HIS WORK OPERATIONS, METHODS, AND CURRENT SITE CONDITIONS TO DEVELOP A COMPLETE PLAN, INCLUDING ADDITIONAL PROTECTION MEASURES AS REQUIRED, TO ASSURE ADEQUATE PERFORMANCE AND COMPLIANCE WITH ALL CONTRACT DOCUMENTS, REGULATIONS, AND PERMITS. REFERENCE SECTION 01 57 20.00 09 ENVIRONMENTAL PROTECTION AND SECTION 01 57 23.00 09 STORM WATER POLLUTION PREVENTION PLAN FOR ADDITIONAL REQUIREMENTS.
6. WATTLE DITCH CHECK CAN BE USED FOR VELOCITY REDUCTION AND CONTROL OF SEDIMENT TRANSPORT UNDER LOW TO MEDIUM FLOW CONDITIONS.
7. THE PLACEMENT INTERVAL BETWEEN WATTLE DITCH CHECKS SHALL BE 100' UNLESS SHOWN OTHERWISE ON THE PLANS OR EROSION CONTROL PLAN APPROVED BY THE CONTRACTING OFFICER.
8. ANCHORING WOOD STAKES SHALL BE SIZED, SPACED, DRIVEN, AND BE OF A MATERIAL THAT EFFECTIVELY SECURES THE WATTLE. STAKE SPACING SHALL BE A MAXIMUM OF THREE FEET. ALL NON-DEGRADABLE MATERIALS SHALL BE REMOVED WHEN NO LONGER NEEDED.
9. WATTLES SHALL BE INSTALLED IN A TWO INCH DEEP TRENCH.
10. WATTLES SHOULD NOT BE USED IN HARD BOTTOM CHANNELS.
11. USE OF FLOATING TURBIDITY CURTAINS MAYBE NECESSARY WHEN WORKING AROUND THE WATER'S EDGE.

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: E. SHEPHERD
DRAWN BY: E. SHEPHERD
CHECKED BY: B. GRIFFIN
SUBMITTED BY: DAVID L. WALLACE, P.E.
SIZE: ANSI D
ISSUE DATE: SEPTEMBER 2024
SOLICITATION NO.: XXXXXX-XX-X-XXXX
CONTRACT NO.: XXXXXX-XX-X-XXXX

U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
ADME SECTION
VICKSBURG, MS

CALHOUN COUNTY, MS
YALOBUSHA RIVER CHANNEL MAINTENANCE
FCMP&T YAZOO RIVER BASIN
YALOBUSHA RIVER WATERSHED

STORM WATER POLLUTION PREVENTION PLAN DETAILS

SHEET ID

C-503

ENCLOSURE 3. Order of Work

Yalobusha River Channel Maintenance

Details related to sequencing and scheduling can be found in section 3.1.1 of the "Clearing and Excavation" section of the provided specification documentation

SECTION 31 23 03.00 09

CLEARING AND EXCAVATION

PART 1 GENERAL

PART 2 PRODUCTS

PART 3 EXECUTION

3.1 CLEARING

3.1.1 Order of Work

All required BMPs shall be implemented as prescribed by the Storm Water Prevention Plan prior to any land disturbing activities. Clearing and grubbing shall be preformed in 1,000 foot intervals. Once excavation is completed on one section, and fertilizing, seeding, and mulching operations have started, the next 1,000 foot section can be cleared and grubbed.

3.1.2 General

Clearing shall consist of the removal and ultimate disposal of all trees, brush, vines, logs, snags, drift, and similar debris as neccessary for construction within the required construction area. Clearing of vegetation outside of top bank shall be limited to the absolute minimum necessary for construction of the work, together with strips 5 feet wide contiguous thereto. Care shall be taken by the Contractor to not cut or injure any trees or crops which do not unreasonably interfere with the construction. All clearing operations shall be conducted in a manner to prevent any cleared materials from entering the stream channel. Contractor shall install all necessary BMPs following clearing and grubbing activities.

3.1.3 Disposal of Cleared Materials

All trees, brush, vines, logs, snags, drift, and similar debris resulting from the clearing and snagging operations, including clearing for the convenience of the Contractor, shall be disposed of between the right of way and the existing spoil berm.

3.2 EXCAVATION

3.2.1 General

Excavation shall consist of removal and disposal of all materials of whatever nature encountered to excavate the channel to the lines, grades, and section shown for channel maintenance. Excavation may be performed by any approved methods which will produce the desired results. Excavation shall begin at the upstream end of the work at Sta. 390+00 and proceed continuously to the downstream end of the work at Sta. 0+70. A smooth transition for changes in the side slopes shall be provided at the downstream and upstream ends of the work.

ENCLOSURE 4. SITE MAPS

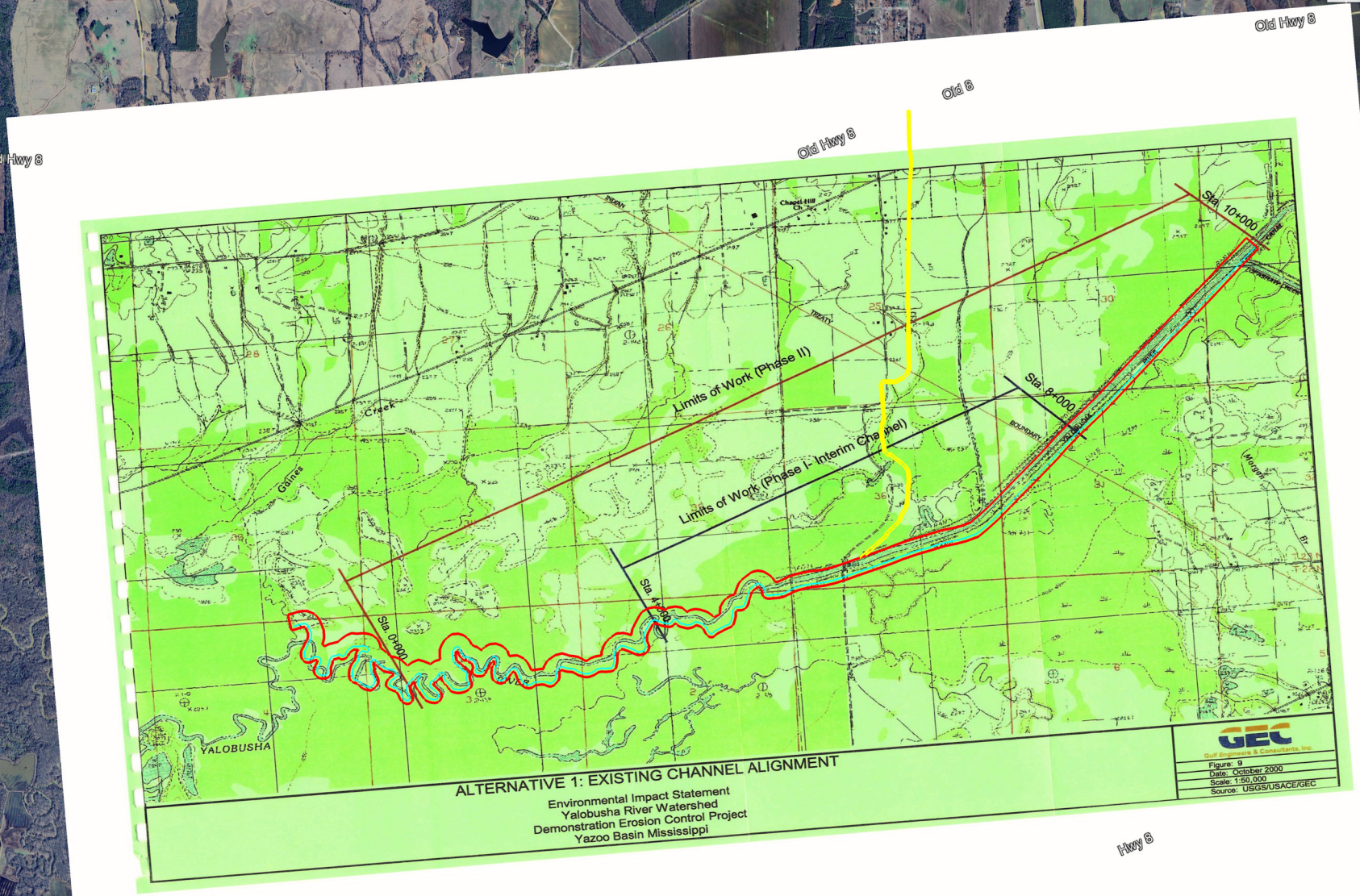
Yalobusha River Channel Maintenance

Location Map – Quad Map

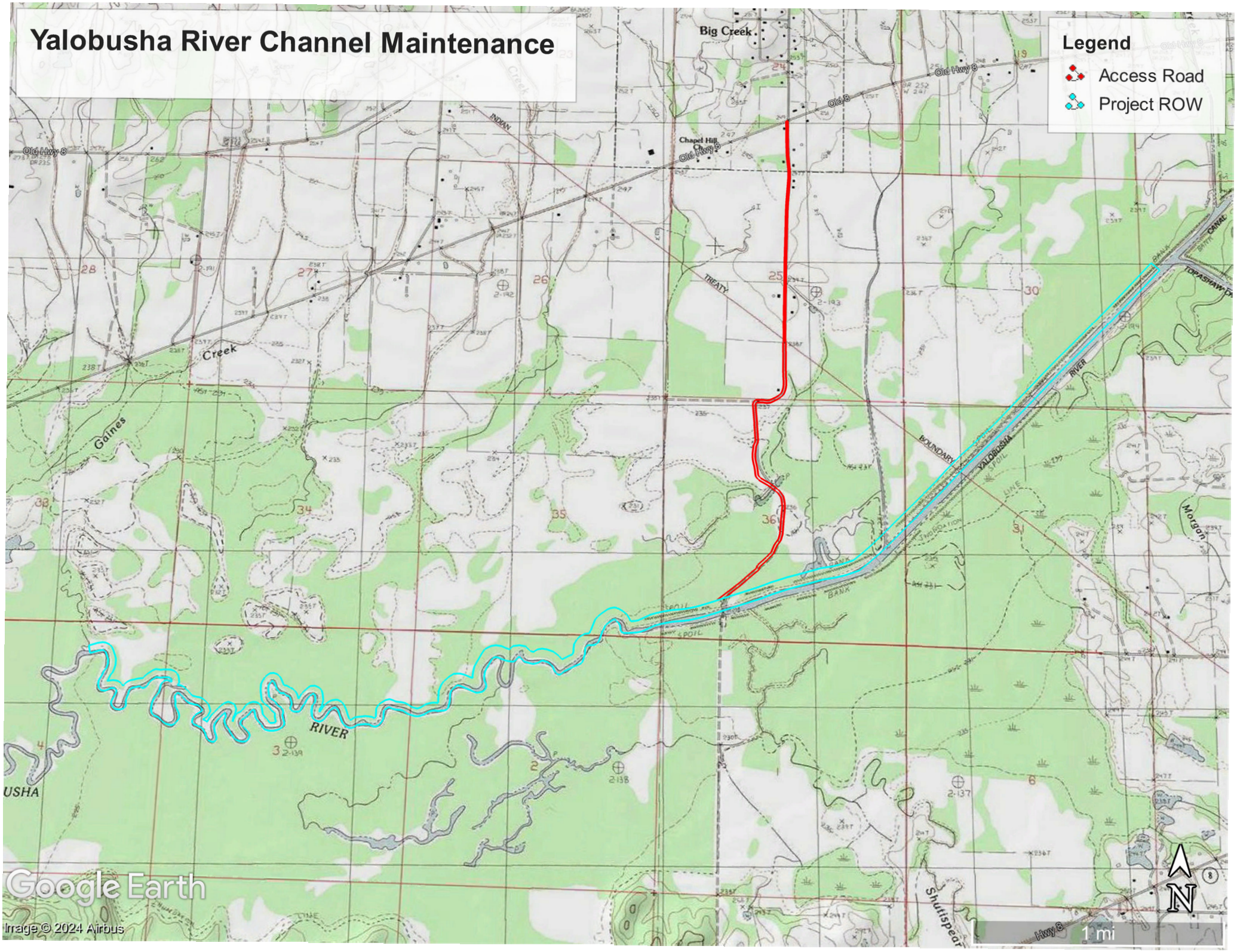
Yalobusha River Channel Maintenance

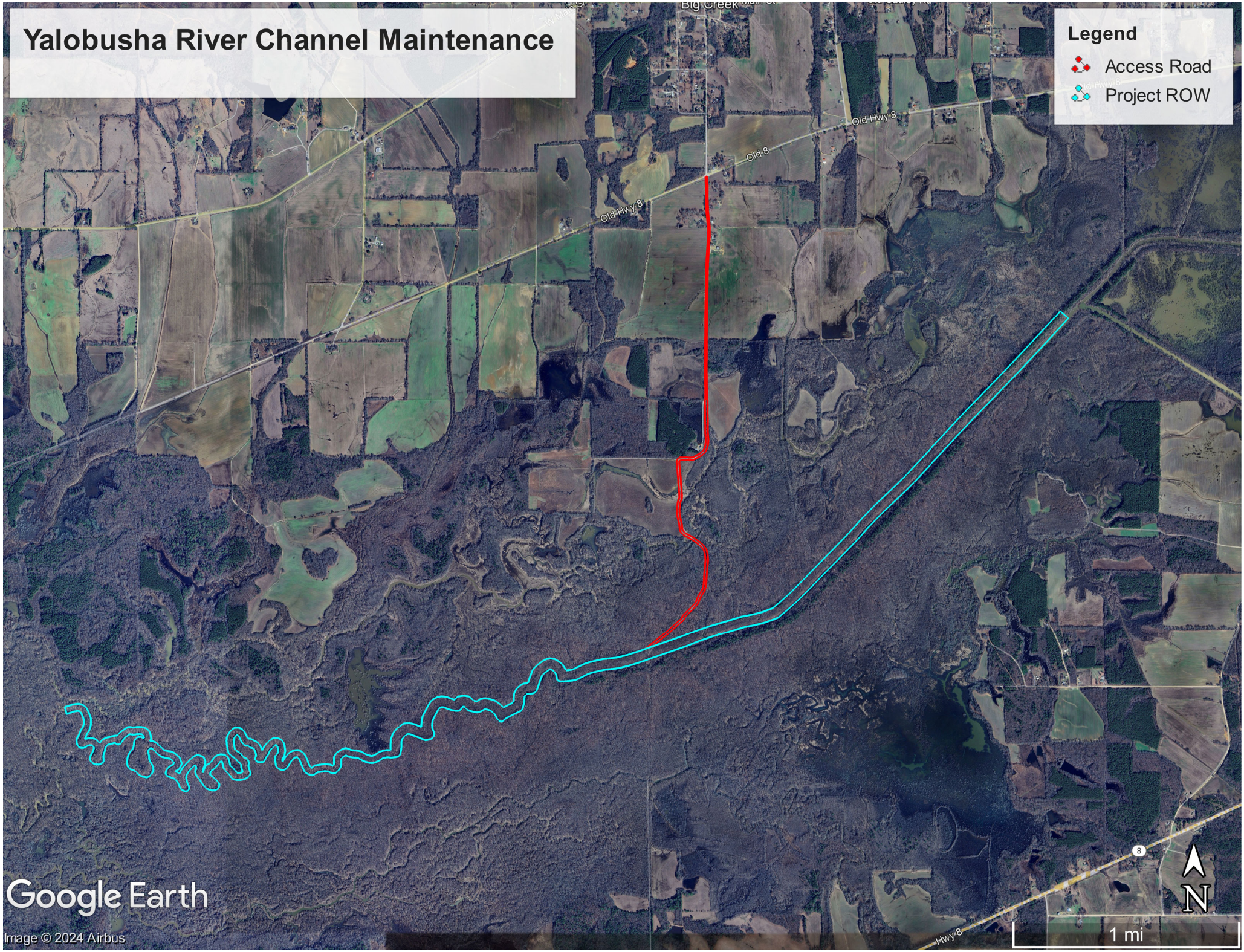
Legend

- Access Road
- Row



2 mi


Yalobusha River Channel Maintenance
Legend
Access Road
Project ROW
Big Creek
Old Hwy 8
Chapel Hill
Old Hwy 6
INDIAN
TREATY
Creek
Gaines
RIVER
BOUNDARY
YALOBUSHA
SPOIL
BANK
CANAL
TORASHAW
Morgan
Shuttspear
Hwy 8
1 mi
N
Google Earth
Image © 2024 Airbus


Yalobusha River Channel Maintenance
Legend
Access Road
Project ROW
Big Creek
Old-Hwy 8
Old-8
Old-Hwy 8
Hwy 8
8
N
1 mi
Google Earth
Image © 2024 Airbus

ENCLOSURE 5. WATER QUALITY CERTIFICATION LETTER

Yalobusha River Channel Maintenance

Water Quality Certification Letter

State of Mississippi

TATE REEVES
Governor

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

CHRIS WELLS, EXECUTIVE DIRECTOR
October 12, 2021

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

Re: US Army Corps of Engineers
Nationwide Permit No. 3
WQC No. WQC2021032

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

US Army COE, Nationwide Permits:

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

3. *Maintenance.*

(a) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, requirements of other regulatory agencies, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized.

This NWP authorizes the removal of previously authorized structures or fills. Any stream channel modification is limited to the minimum necessary for the repair, rehabilitation, or replacement of the structure or fill; such modifications, including the removal of material from the stream channel, must be immediately adjacent to the project. This NWP also authorizes the removal of accumulated sediment and debris within, and in the immediate vicinity of, the structure or fill. This NWP also authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the district engineer, provided the permittee can demonstrate funding, contract, or other similar delays.

(b) This NWP also authorizes the removal of accumulated sediments and debris outside the immediate vicinity of existing structures (e.g., bridges, culverted road crossings, water intake structures, etc.). The removal of sediment is limited to the minimum necessary to restore the waterway in the vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend farther than 200 feet in any direction from the structure. This 200 foot limit does not apply to maintenance dredging to remove accumulated sediments blocking or restricting outfall and intake structures or to maintenance dredging to remove accumulated sediments from canals associated with outfall and intake structures. All dredged or excavated materials must be deposited and retained in an area that has no waters of the United States unless otherwise specifically approved by the district engineer under separate authorization.

(c) This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to conduct the maintenance activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. After conducting the maintenance activity, temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

(d) This NWP does not authorize maintenance dredging for the primary purpose of navigation. This NWP does not authorize beach restoration. This NWP does not authorize new stream channelization or stream relocation projects.

Notification: For activities authorized by paragraph (b) of this NWP, the permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 32). The pre-construction notification must include information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals. (Authorities: Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (Sections 10 and 404))

Note: This NWP authorizes the repair, rehabilitation, or replacement of any previously authorized structure or fill that does not qualify for the Clean Water Act Section 404(f) exemption for maintenance. [NWP No. 3, WQC2021032].

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

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

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

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

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

As part of the Scope of Review for Application Decisions, 11 Mississippi Administrative Code Part 6, Rule 1.3.4(B), the above conditions are necessary for the

Department to ensure that appropriate measures will be taken to eliminate unreasonable degradation and irreparable harm to waters of the State, such that the activity will not meet the criteria for denial:

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

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

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

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

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

Sincerely,

Krystal Rudolph

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

KR: ld

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