

Memorandum

DATE: July 16, 2025
FROM: Brandon Harland
RE: Rationale for Section 401 Water Quality Certification for 2025-0302 USACE
Regional Permit 40 (RP40)

Description of Projects: Work associated with the discharge of dredged and/or fill material into all waters of the United States, including wetlands (WOTUS), for bank stabilization activities which will have minimal adverse environmental impact.

Location of Projects and Receiving Water Bodies:

All waters of the United States in Iowa within the regulatory boundaries of the Rock Island District.

If the project impacts an Outstanding Iowa Water (OIW), an individual 401 Water Quality Certification (WQC) must be obtained, and the permittee shall not begin work on the activity until an individual 401 WQC is issued by the state or waived.

This permit may be used on tribal lands in the state of Iowa; however, an individual 401 WQC from the applicable tribal government may be required prior to authorization.

Antidegradation

Pollutants of Concern

This project proposes activities required for fill material placed in Waters of the United States for bank stabilization activities. Chemicals will not be used. Thus, the pollutants present in the discharge from such construction are substances present in runoff, or are the result of a spill. The DNR has identified the following pollutant of concern in discharges from this project and the potential impacts on water quality:

Increased Turbidity/Total Suspended Solids

The turbidity of water is related to the amount of suspended solids contained in the water. Suspended solids decrease the clarity of water, reduce light penetration, and can impair the photosynthetic activity of aquatic plants. Suspended solids can be aesthetically displeasing and can reduce the recreational value of a water body. If suspended solids screen out light and impair growth of aquatic plants, dissolved oxygen levels can decrease. Suspended solids can be harmful to fish and other aquatic life by causing abrasive injuries and clogging gills and respiratory passages.

Increases in turbidity/total suspended solids from projects authorized by this project will generally be local and temporary. To address turbidity/total suspended solids, the permittee will control runoff to water bodies using a variety of best management practices (BMPs).

Best Management Practices in Permit and Certification Conditions

Permit-Based

The Corps has BMP-based conditions in the Section 404 permit.

Construction activity that disturb one or more acres require a storm water NPDES permit from the DNR. For projects that require storm water NPDES permits, Storm Water Pollution Prevention Plans (SWPPPs) are developed, which typically include BMP-based conditions.

Certification-Based

The DNR is adding BMP-based conditions to the certification. The combined listed BMPs, when adhered to by the permittee, protect Iowa's water quality by controlling erosion and sediment runoff to prevent pollution from reaching the nearby water bodies. Antidegradation requirements will be considered to be met if all appropriate and reasonable BMPs required by permit and certification are applied and maintained. See, 567 IAC 61.2(2); Iowa Antidegradation Implementation Procedure § 6.3.

Temporary and Limited Degradation

The State adopted Iowa Antidegradation Implementation Procedure (2010 and 2016) states that "A regulated activity shall not be considered to result in degradation, if the activity will result in only temporary and limited degradation of water quality as defined in the glossary and as further described in Sections 1.2 and 2.4." The effects can be regarded as temporary and limited following a review of all of the following factors, if applicable:

- a) Length of time during which water quality will be lowered
The length of time where there might be a lowering of water quality is relatively short for the proposed activity.
- b) Percent change in ambient conditions
The only significant change that is reasonably expected to occur would be for the presence of sediment in the stream if there is a heavy rainstorm or if the BMPs fail.
- c) Pollutants affected
Turbidity, total suspended solids.
- d) Likelihood for long-term water quality benefits to the water body
The projects authorized by RP40 can provide water quality benefits by stabilizing a stream bank.
- e) Degree to which achieving the applicable Water Quality Standards during the proposed activity will be at risk
The use of BMPs installed prior to construction, maintained during construction, and until the site has returned to pre-construction conditions should greatly increase the degree to which a project achieves the applicable water quality standards.
- f) Potential for any residual long-term effects on existing uses
The BMP-based conditions included in the Section 404 permit and certification include activities such as appropriate riprap and minimizing soil disturbance and compaction from heavy equipment. The projects authorized by RP40 should not contribute to any ongoing impacts to water quality.

For the above discussed reasons, the DNR makes the following finding:

This review concludes that water quality degradation due to this activity is temporary and limited.

Social and Economic Importance

This project is socially important for improving water quality and protecting building and bridge infrastructure used by the general public.

This project is economically important for the community, by creating jobs in the planning and construction of this project and likely using materials from local sources, for the value of the property.

For the above discussed reasons, the DNR makes the following finding:

This review concludes that water quality degradation due to this activity is necessary to accommodate important economic and social development.



Water Quality Pre-Filing Meeting Request and Certification Request Form

This form should only be completed and submitted if your project requires one of the following:

- Corps of Engineers (Corps) standard/individual Section 404 permit;
- Corps Section 404 nationwide or regional permit where the Corps waives a limit;
- Corps Section 404 nationwide or regional permit on an [Outstanding Iowa Water](#);
- Federal Energy Regulatory Commission license; or
- Other federal permit or license requiring a Section 401 Water Quality Certification.

Federal regulation [40 CFR 121.4](#) requires the applicant to submit a pre-filing meeting request before filing a certification request. More information may be viewed on the [U.S. EPA Overview of §401 Certification](#) website.

IMPORTANT NOTE: Iowa Administrative Code 567—[Chapter 61](#) currently states that a certification request form **may not** be submitted until **at least 30 days** have passed since the “Pre-filing Meeting Request” was submitted to the DNR.

The following is a guide for completing the Department of Natural Resources’ (DNR) pre-filing meeting request and certification request form. The information is required, and if not filled out completely, the request may be determined to be incomplete, which may delay the 401 certification process. If additional space is needed for any item on the form, attach additional page(s) as necessary. Please note that DNR may request additional information if it is needed to prepare the §401 Water Quality Certification (certification).

Separately submit pre-filing meeting request and, when ready, the certification request and attachments by email to Section401WQC@dnr.iowa.gov

Contact Section 401 Water Quality Certification at the DNR with any questions:
Section401WQC@dnr.iowa.gov; 515-954-6450
Iowa DNR, Attn: Section 401 Water Quality Certification, 6200 Park Ave Ste 200, Des Moines IA 50321

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Water Quality Pre-Filing Meeting Request and Certification Request Form

Pre-Filing Meeting Request Instructions

1.
 - a. **Property Owner/Project Proponent (aka Applicant) Name.** Enter the name, primary residence mailing address, email address, and phone number(s) of the responsible party or parties. If the responsible party is an agency, company, corporation, or other organization, indicate the name of the organization and responsible officer. If there is more than one party, please attach a sheet with the necessary information. Please note that the Project Proponent means the applicant for a license or permit or the entity seeking certification.
 - b. **Authorized Agent's Name.** If applicable, indicate the name of the individual or agency, designated by you, to represent you in this process. An authorized agent (agent) can be an attorney, builder, contractor, engineer, or any other person or organization. Please provide the agent's complete mailing address, email, and telephone number where the agent can be reached during normal business hours. **Note: An agent is not required.**
2. **Proposed Project Description.** Please provide a name and description identifying the proposed project, (examples: Smith Lake shoreline stabilization, U.S. 66 Mississippi River Bridge replacement, utility line replacement, or Wallace Building rain garden). Proposed project means the activity or facility for which the project proponent has applied for a federal license or permit. Please include a map or diagram of the proposed project area, as well as photographs and any other relevant site data. If you have any other readily available water quality-related materials not specified in this form, please include a brief description here and include them as an attachment in the application. Existing water quality-related materials are those in the project proponent's possession or easily obtainable and inform the project proponent's development of the application or draft license or permit.
3. **Project Location:** The location should be provided as latitude and longitude and county that the project is located in. Provide latitude and longitude in decimal degrees with four decimal places, example: latitude: 41.5919, longitude: -93.6061. Use www.latlong.net if needed for finding latitude/longitude. Please provide the name of the water body (water bodies) receiving the discharge. For minor streams with no official name, you can use "unnamed tributary".

Receiving Water(s): This is the name of the water body (or water bodies) that will be affected by the project (e.g., rivers, streams, and/or wetlands).

Discharge: A discharge is any material entering the water (e.g., riprap, bridge piers, culvert, utility lines, fill material, dredged material, chemicals, etc.).
4. **Pre-filing Meeting Request Verification.** By signing the form, you must agree with everything stated in this section. The signature of the property owner/project proponent is required. If you are working with an authorized agent, their signature is also required.

Iowa Department of Natural Resources
Section 401 Water Quality Pre-Filing Meeting and Certification Request Form
Pre-Filing Meeting Request Form

1a. Property Owner/Project Proponent (aka Applicant) Name: _____

Company Name (if applicable): _____

Mailing Address: _____

Email Address: _____

Phone numbers (with area code): Home: _____ Cell: _____ Business: _____

1b. Authorized Agent's Name (if applicable): _____

Company Name: _____

Mailing Address: _____

Email Address: _____

Phone numbers (with area code): Business: _____ Cell: _____

2. Identify the Proposed Project:

3. Project Location:

County: _____ Latitude: _____ Longitude: _____

Receiving Water(s): _____

Discharge: _____

4. Pre-filing Meeting Request Verification:

I certify that I have read and understand the following statements per the Clean Water Act Section 401 Certification Rule:

- Submission of this form completes the requirement of the pre-filing meeting request.
- I cannot submit my certification request until at least 30 calendar days after submitting this pre-filing meeting request. This request must be signed by the Property Owner/Applicant and the Authorized Agent, if applicable.
- I have included the following materials in the application:
 - ☐ Map/diagram of the proposed project area (required)
 - ☐ Photographs of the proposed project area (required)
 - ☐ Relevant site data (if applicable)

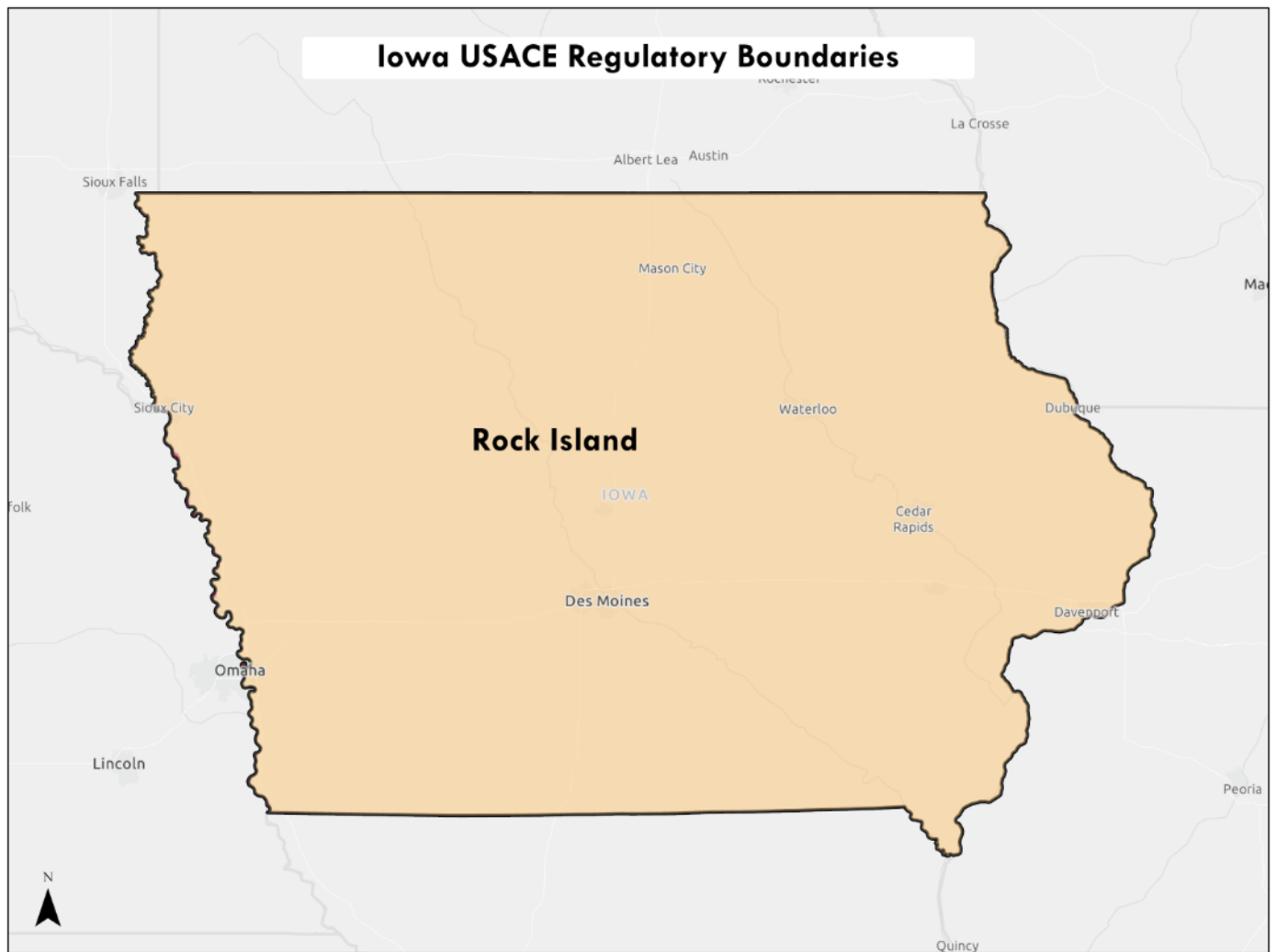
Property Owner/Applicant's Name (printed): _____

Property Owner/Applicant's Signature: _____ Date: _____

If applicable: Authorized Agent's Name (printed): _____

Authorized Agent's Signature: _____ Date: _____

Iowa USACE Regulatory Boundaries



**U.S. ARMY CORPS
OF ENGINEERS**
Rock Island District

Regional Permit 40
Bank Stabilization Activities in the State of Iowa
Proposed Project Area
MVR-2025-0302



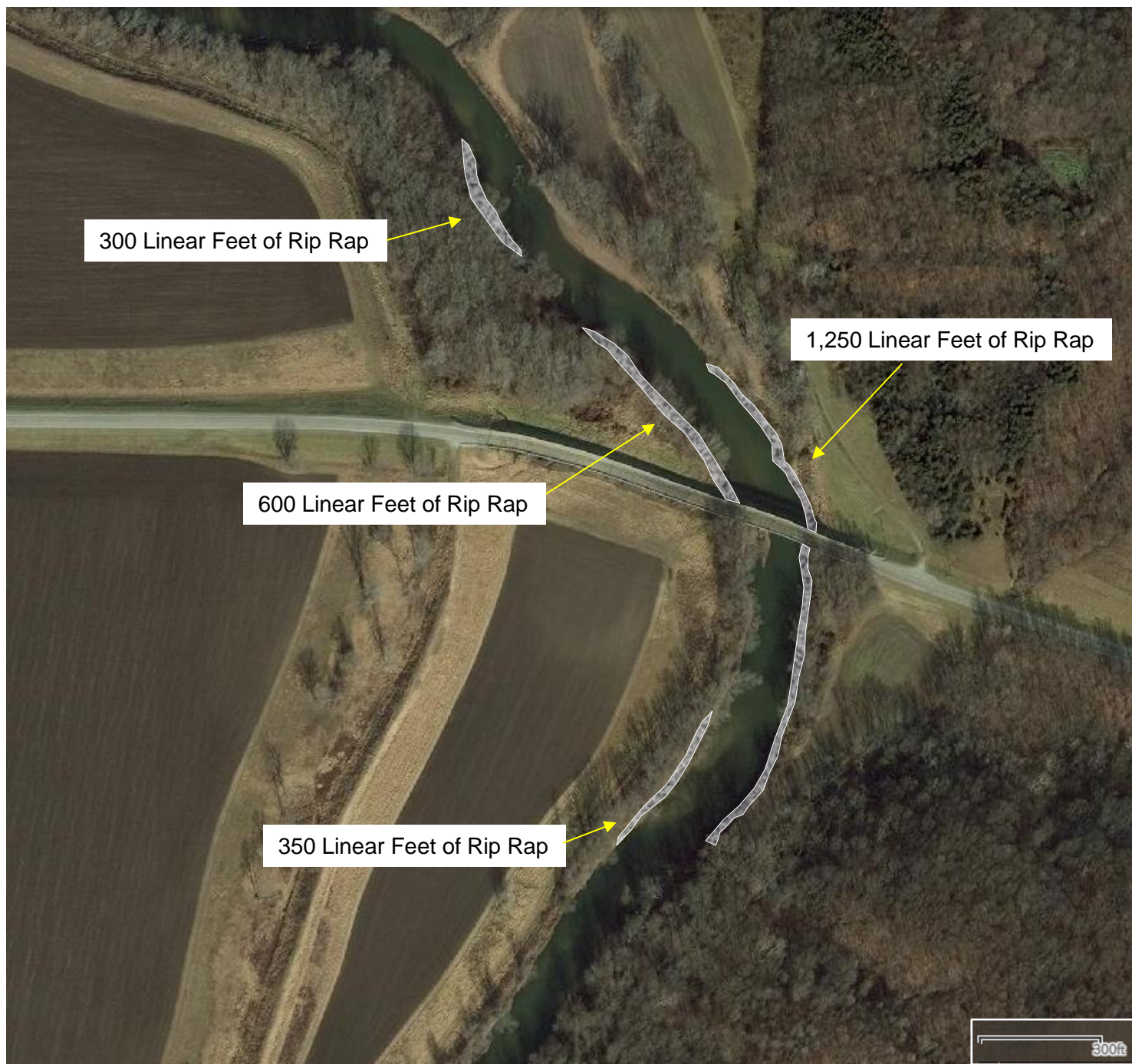
**U.S. ARMY CORPS
OF ENGINEERS**
Rock Island District

Regional Permit 40
Bank Stabilization Activities in the State of Iowa
Example Photographs
MVR-2025-0302



**U.S. ARMY CORPS
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Rock Island District

Regional Permit 40
Bank Stabilization Activities in the State of Iowa
Example Photographs
MVR-2025-0302



Example Rip Rap

Example of how total fill might be counted towards the permit limits



**U.S. ARMY CORPS
OF ENGINEERS**
Rock Island District

Bank Stabilization Activities Example

This location was chosen arbitrarily for the purpose of this visual example. By using this map, you acknowledge that the location and content are for illustrative purposes only and should not be relied upon for navigation, decision-making, or any other purpose. The map is not intended to be an accurate representation of an actual project.

Water Quality Pre-Filing Meeting Request and Certification Request Form

Certification Request Instructions

5. **Corps Project Manager.** Enter the name, email address, and phone number(s) of the Corps project manager associated with the proposed project.
6. **Federal Permit / License Requiring Section 401 Water Quality Certificate and its Project Number.** Certification is required for any federal license or permit that authorizes an activity that may result in a discharge to a water of the United States. The federal agency can tell you what their identification number is for your project. Please check the appropriate box to indicate the federal agency. **Important:** A copy of the federal permit or license application is **required** to be submitted with this certification request. For the Corps of Engineers Section 404 permits, DNR Flood Plain, and Sovereign Lands permits, the application form can be found on the [DNR's Flood Plain webpage](#).
- Examples: Corps of Engineers NWP 27 #2020-0830
Corps of Engineers RP 33 #2020-1609
Corps of Engineers IP #2020-0361
FERC Hydropower #11530
7. **Include a description of any methods and means proposed to monitor the discharge and the equipment or measures planned to treat, control, or manage the discharge.** Please provide a description of the best management practices you will use to protect water quality as well as any methods and means proposed to monitor the discharge/equipment or measures planned to treat or control the discharge (e.g., silt fences will be installed to prevent sediment entering the water body, all equipment will be cleaned prior to construction, equipment will be checked regularly to ensure oil, gas, or other material do not enter the water body).
8. **Dates.** Exact start and end dates for the proposed project are required, while date(s) of proposed discharges can be approximate. While the DNR has a default reasonable period of time of 6 months to respond to a certification request, the DNR intends to respond to requests as quickly as possible within that time period.
9. **List all other federal, interstate, tribal, state, territorial, or local agency authorizations required for the proposed project, including all approvals or denials already received.** Typical authorizations include DNR Flood Plain, DNR Sovereign Lands, DNR NPDES Storm Water, and zoning permits.

Examples:

Agency	Type of Authorization	Agency Number	Date Applied	Date Approved	Date Denied
DNR	Flood Plain	2020-0517	6/15/2021	10/8/2021	
DNR	Sovereign Lands	2020-0517	6/15/2021		7/2/2021
DNR	NPDES	3500901	2/14/2021	5/20/2021	

10. **Date Pre-filing Meeting Request was submitted.** List the date that a pre-filing meeting request was submitted to the DNR.
11. **Certification Request Verification.** By signing the form, you must agree with everything stated in this section. The signature of the property owner/project proponent is required. If you are working with an authorized agent, their signature is also required.

Note: Certification requests must also be sent to the Federal Agency (i.e., Corps, FERC, etc.) at the same time. All projects in Iowa are in the Rock Island Corps District except for those below the ordinary high water mark of the Missouri River or west of the Missouri River, which are in the Omaha Corps District. For the Rock Island District Corps, send to the Corps project manager or to iowaregulatory@usace.army.mil. For the Omaha District Corps, send to the Corps project manager or to NE404Reg@usace.army.mil.

Iowa Department of Natural Resources
Section 401 Water Quality Pre-Filing Meeting and Certification Request Form
Certification Request Form

5. Corps Project Manager*:

Email Address: _____

Phone numbers (with area code): Business: _____ Cell: _____

*The corps project manager must be cc'ed on the certification request email.

6. Federal Permit / License Requiring Section 401 Water Quality Certificate and its Project Number*

Permit/License Number: _____ Federal Agency: ☐ Corps of Engineers ☐ FERC
☐ Other: _____

*A copy of the federal permit or license application is **required** to be submitted with a certification request.

7. Include a description of any methods and means proposed to monitor the discharge and the equipment or measures planned to treat, control, or manage the discharge. (Please provide a description of the best management practices you will use to protect water quality as well as any methods and means proposed to monitor the discharge/equipment or measures planned to treat or control the discharge.)

8. Dates*

Planned Start Date of Proposed Project: _____

Planned End Date of Proposed Project: _____

Approximate date(s) of discharge(s) (if known): _____

*In normal situations, the DNR issues certifications within 90 days. This period of time accommodates internal review and the mandatory public comment period. If your project is scheduled to start sooner, please contact us at Section401WQC@dnr.iowa.gov. Be advised that the DNR is entitled up to six months by law to review certification requests.

9. List all other federal (not listed in #6), interstate, tribal, state, territorial, or local agency authorizations required for the proposed project, including all approvals or denials already received:

Agency	Type of Authorization	Agency Number	Date Applied	Date Approved	Date Denied

10. Date Pre-filing Meeting Request was submitted _____

11. Certification Request Verification

This request is hereby made for the activities described herein. I hereby certify that all information contained herein is true, accurate, and complete to the best of my knowledge and belief. I have completed the following tasks, as required for the certification request:

- ☐ Cc'ed the Corps contact associated with the proposed project
- ☐ Attached a copy of the federal permit or license application
- ☐ Submitted a complete pre-filing meeting request at least 30 days ago

I further certify that I possess the authority to undertake the proposed activities. I hereby request that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time. This application must be signed by the Property Owner/Applicant and the Authorized Agent, if applicable.

Property Owner/Applicant's Name (printed): _____

Property Owner/Applicant's Signature: _____ Date: _____

If applicable: Authorized Agent's Name (printed): _____

Authorized Agent's Signature: _____ Date: _____

DEPARTMENT OF THE ARMY PERMIT
Regional Permit 40
Fill Material Placed in Waters of the United States for Bank Stabilization Activities
In the States of Iowa

Permittee: General Public meeting the terms and conditions herein.

Number: CEMVR-RD-2025-302 (Regional Permit 40)

Expiration Date: DATE

Issuing Office: U.S. Army Corps of Engineers, Rock Island District
Clock Tower Building-P.O. Box 2004
Rock Island, Illinois 61204-2004

NOTE: The term “you” and its derivatives, as used in this permit, means the permittee or any future transferee.

You are authorized to perform work in accordance with the terms and conditions specified below.

1. Authorized Work Limits.

- A.** The following bank stabilization techniques will be authorized under this regional permit (RP): blanket riprap, seawalls, gabions, minor bank shaping with appropriate biotechnical streambank protection techniques, bendway weirs, longitudinal peaked stone riprap, stone hardpoints, channel defining structures, and grade control structures. For design projects not specifically listed, the plans must be approved by the District Engineer (DE).
- B.** Impacts to Waters of the United States (WOTUS) authorized within this permit shall not exceed **2,500 linear feet below the Ordinary High-Water Mark (OHWM)** of shoreline for the entirety of the proposed project¹. If armoring opposite banks of the same waterway, you are limited to a

¹ Refer to the exhibit titled “Bank Stabilization Activities Example” at the end of this Regional Permit for an example of activity that meets this permit’s work limits.

maximum of armoring **1,250 linear feet per bank and the armoring must end at the toe of the bank to prevent channelization. Permanent loss of wetland is limited to 0.5 acres with compensatory mitigation required at 0.1 acres.** Permanent wetland loss exceeding 0.5 acres shall not be authorized under this RP.

2. Project Location.

All WOTUS in the State of Iowa, within the regulatory boundaries of the Rock Island Districts. This permit may be used on tribal lands within the state of Iowa; however, an individual 401 Water Quality Certification (WQC) must be obtained from the Meskwaki Nation - Sac and Fox tribe of the Mississippi in Iowa, prior to authorization.

3. Permit Conditions:

A. General Conditions:

- 1) The permittee must notify the Rock Island District DE for authorization of this Regional General Permit (RP). The Pre-Construction Notification (PCN) must include information required under 33 CFR part 325.1(d) and ENG Form 4345. Drawings and information submitted should be sufficiently detailed to document the proposed work conforms to the criteria and conditions of the RP, as well as a mitigation plan (see Section E), if unavoidable stream or wetland impacts will occur as a part of the project. It is encouraged that projects be submitted through the Regulatory Request System (<https://rrs.usace.army.mil>) using the "Apply for a Permit" function. If the DE determines that the work meets the provisions of the RP and no extraordinary conditions exist that warrant evaluation as an individual permit, the proponent will be notified to proceed.
- 2) The time limit for submittals ends 60 days prior to the expiration of the RP, unless the RP is modified, reissued or revoked. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before that date is reached. If you commence or are under contract to commence this activity before the date the RP is modified or revoked, you will have twelve months from this date to complete your activity under the present terms and conditions of this RP.
- 3) If the project impacts an Outstanding Iowa Water, an individual 401 WQC must be obtained, and permittee shall not begin work on the activity until a 401 WQC is issued by the State or waived by the DE.

- 4) You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party. If you sell the property associated by this permit, you must obtain the signature of the new owner in the transferee space provided at the end of this document and forward a copy of the permit to this office to validate the transfer of this authorization. Should you wish to cease to maintain the authorized activity, or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
- 5) If you discover any previously unknown historic or archaeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
- 6) You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

B. Special Conditions:

- 1) **The following materials may be used:** suitable clean materials (free from debris, trash, and other deleterious materials); rock, *broken concrete, steel sheet piling, cellular blocks, fabric-formed concrete, concrete-filled fabric mats, gabion baskets, rock, sand/cement filled bags, geotechnical fabric materials, natural vegetation (with proper grading), and **treated wood.

*If broken concrete is used, all protruding material such as reinforcing rods shall be removed or cut flush with the surface of the concrete and removed from the construction area. Broken concrete should be cut into pieces no larger than 3 feet by 3 feet, to prevent the pieces from washing downstream in high flow events.

**If treated wood is used, it shall be made from newer water-based wood preservatives designed for residential uses, as listed on the EPA website: <https://www.epa.gov/ingredients-used-pesticide-products/overview-wood-preservative-chemicals>. If approval is not specifically granted for a specific material, it is deemed to not be allowable under this RP.

2) Design Specifications:

a. Blanket riprap.

- 1) Bank shoreline protection shall not exceed 2,500 feet in length and must contain less than two cubic yards of fill material per running foot below the ordinary high-water mark.
- 2) For projects involving continuous placement of riprap along the bank, toe of the bank, or other similar applications, the cross-sectional area of the natural channel shall not be reduced by more than 10 percent, nor the volume of material exceed 2 cubic yards per lineal foot of stream bank or shoreline. The bank may be graded to obtain a flatter slope and to lessen the quantity of material required.
- 3) A well distributed mix of stones weighing from 20 to 200 pounds should be used.
- 4) The riprap should be from 12 inches to 18 inches thick. Portions of the riprap layer under water should be increased to 18 inches to 30 inches thick
- 5) Riprap materials shall not be placed at a steeper slope than 2:1 (2 horizontal to 1 vertical) for dumped riprap and 1.5:1 for hand-placed riprap. A bedding layer of either six inches of gravel or filter material must be used if required to prevent loss of fines through the riprap material. The riprap must be sized to withstand the anticipated forces from flood flows or wave action.
- 6) A riprap trench or apron should be provided at the base of the protected bank for stability.
- 7) Both ends of the project should be tied into the bank, with the most common method being to excavate a trench in the bank and fill it with riprap. Additionally, the project should be tied into the bank at regular intervals of between 100 feet and 200 feet.
- 8) Blanket riprap shall be constructed to current conservation practice standards of the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS). Current NRCS design materials are available online by searching Conservation Practice Standard Channel Bed Stabilization (Code 584). This document and its access may be

updated and change periodically, refer to NRCS's website to search for updated versions.

b. Seawalls and Gabions.

- 1) Seawalls and gabions shall not exceed 500 feet in length and will be constructed at or landward of the waterline as determined by the normal pool elevation.
- 2) Seawalls constructed in alignment with an existing seawall(s) or gabion structure(s) shall not extend further than 500 feet in length total.
- 3) Seawalls and gabions must conform to the existing shoreline and may not be used to reclaim land lost to erosion. The bank may be graded to obtain a flatter slope and to lessen the quantity of material required.
- 4) Seawalls and Gabions shall be constructed to current design standards of the U.S. Department of Agriculture, Natural Resources Conservation Service. Current NRCS design materials are available by searching Construction Specification 64—Gabions and Gabion Mattresses. This document and its access may be updated and changed periodically, refer to NRCS's website to search for updated versions.

c. Bank shaping with appropriate biotechnical streambank protection techniques. Minimal grading and bank shaping activities for state-of-the-art natural vegetative stabilization methods, such as the willow post method or other approved methods, will be authorized under this RP. Material produced by grading and bank shaping shall be pulled back from the water's edge. The current NRCS Conservation Practice Standard for biotechnical streambank stabilization can be found by searching Riparian Forest Buffer (Code 391) or Riparian Herbaceous Cover (Code 390). This document and its access may be updated and changed periodically, refer to NRCS's website to search for updated versions.

d. Hard points. Hard points are short rock intrusions extending only a short distance from the bank. Hard points may be used if they are keyed into the bank and if they do not extend from the bank more than the minimum necessary to achieve adequate erosion protection. The DE will determine on a case-by-case basis whether the proposed hard point is acceptable for the stream. Jetties, which extend from the bank further than hard points and are taller and require more rock, are specifically excluded in riverine environments but may be proposed in lacustrine environments.

- e. Longitudinal peaked stone riprap. Longitudinal peaked stone riprap is a continuous stone dike placed along the toe of the bank. Riprap with a gradation from maximum stone size of 400 pounds to 50 to 70 percent smaller than a 90-pound stone size is placed in a pyramid or triangular shaped cross section at the toe of an eroding bank without shaping the banks. The riprap should be tied into the bank at both the upstream and downstream ends. Additionally, short riprap dikes should be tied into the bank at regular intervals of between 100 feet and 200 feet.
- f. Bendway weirs. A bendway weir is a low-level rock sill located in the channel of a bend angled 0 degrees to 25 degrees upstream into the stream flow. The structures are spaced approximately 50 feet to 150 feet apart. The weirs should be attached (keyed into) the outer bank of the stream bend. The weirs should be built of well-graded stone with an upper weight limit of 650 pounds to 1000 pounds. Typically, the weirs are 2 feet high at the stream end and rise to 4 feet high at the bank end. Bendway weirs act to redirect the flow away from the eroding bank as flow over the weir is redirected at right angles to the downstream face of the weir. Bendway weirs may extend into the channel a maximum of 33% of stream width. The construction of bendway weirs is not authorized under this RP on the Mississippi River, Missouri River, or on the Des Moines River.
- g. Channel Defining Structures. A channel defining structure is a rock structure which projects out from the bank on a sharp upstream angle of 20 to 30 degrees, measured from bank tangent line. Channel defining structures are designed to direct the stream current away from the eroding bank to the center of the channel. The structures will be built of well-graded stone with an upper weight limit of 650 pounds to 1000 pounds. At the bank, the top of the structures will be constructed to the design height, typically 4 to 8 feet above the streambed. The top of the structures will incline from the bank end to streambed level at the riverward end. The incline will be according to design, typically 10% (10 horizontal to 1 vertical). On silt-bottom streams, the structures will be keyed into the streambed by excavating a core trench for the full length of the structure and backfilling with riprap rock. The structures will be keyed into the outer bank. The bank key trench will be excavated perpendicular to the streambank, from streambed to top-of-bank, and backfilled with riprap rock. Channel defining structures are designed to extend into the channel a maximum of 33% of stream width. The construction of channel defining structures is not authorized under this RP on the Mississippi River, Missouri River, or on the Des Moines River.

h. Grade Control Structures. Grade control structures are low-head weir structures constructed over the streambed from bank-to-bank. Constructed grade control structures are used to stabilize the streambed where downcutting erosion is occurring. Grade control structures must allow for upstream and downstream passage of fish during all flows. Grade control structures will be built of well-graded riprap rock with an upper weight limit of 650 pounds to 1000 pounds. The largest individual stones will be sorted from the stockpiled rock to be placed as emergent boulders and crest stone. The crest of the structure will be "V" shaped on the centerline of the structure. From the crest, the downstream slope will be no steeper than 20H:1V, and the upstream slope will be no steeper than 4H:1V. Grade control structures will be keyed into the streambed and bank using riprap rock. Bed keys will be constructed from bank-to-bank with a minimum depth of 2 feet and minimum width of 4 feet. Bank keys will be constructed into both banks with a minimum depth of 5 feet and a minimum width of 4 feet, extending upward on a 1.5H to 1V slope toward the top-of-bank. Grade control structures shall be constructed to current design standards of the U.S. Department of Agriculture, Natural Resources Conservation Service. Current NRCS design materials are available by searching Grade Stabilization Structure (Code 410). This document and its access may be updated and changed periodically, refer to NRCS's website to search for updated versions. The construction of grade control structures is not to be authorized under this RP on the Mississippi River, Missouri River, or on the Des Moines River.

- 3) Measures must be taken for heavy equipment usage in wetland areas to minimize soil disturbance and compaction.**
- 4) Any spoil material excavated, dredged, or otherwise produced, must NOT be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.**
- 5) Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable**

C. General Restrictions:

These general restrictions must be met for all bank stabilization projects to be authorized under this RP.

- 1) The total affected length of shoreline, stream bank, or channel to be protected shall not exceed **2,500 feet** in length.
- 2) Permanent loss of wetland is authorized up to **0.5 acres with compensatory mitigation required at 0.1 acres**.
- 3) Generally, only those reaches of shoreline, stream bank, and channel which are experiencing erosion are covered by this RP. No material shall be placed in excess of the minimum needed for erosion protection.
- 4) **This RP does not authorize any of the following activities:** stream channelization; channel modifications such as excavating pilot channels; the placement of materials other than on an area of eroded bank; and projects which conflict with a Federal, state, or local project or improvement.
- 5) **The following materials may not be used for projects to be authorized under this RP:** auto bodies, tires, garbage or debris, scrap lumber, metal refuse, roofing materials, broken concrete containing asphalt, asphalt or other bituminous materials, or any material which would cause water pollution as defined by the Environmental Protection Agency. If approval is not specifically granted for a specific material, it is deemed to not be allowable under this RP.
- 6) All material utilized shall be properly sized or anchored to resist anticipated forces of current and wave action.
- 7) Materials shall be placed in such a way which will not cause erosion, or the accumulation of debris on properties adjacent to or opposite the project.
- 8) Materials shall be placed so that the modified bank full width and cross-sectional area of the channel will conform to, or be no more restrictive than, that of the natural channel upstream and downstream of the site.
- 9) Disturbance of vegetation shall be kept to a minimum during construction to prevent erosion and sedimentation. All disturbed areas shall be seeded or otherwise stabilized upon completion of construction. Seed mixes used for plantings must exclude invasives listed on the Iowa Excluded Species List <https://www.mvr.usace.army.mil/missions/regulatory/permits/>.
- 10) Excess material excavated during the construction of bank or shoreline protection shall be placed in accordance with local, state, and Federal laws.
- 11) This RP does not authorize any activity that would conflict with a Corps civil works project's congressionally authorized purposes, established limitations

or restrictions, or limit an agency's ability to conduct necessary operation and maintenance functions. Per Section 14 of the Rivers and Harbors Act of 1899, as amended (33 U.S.C. 408), no project that has the potential to take possession of or make use of for any purpose, or build upon, alter, deface, destroy, move, injure, or obstruct a Corps civil works constructed work or project, including, but not limited to, levees, dams, jetties, navigation channels, borrow areas, dredged material disposal sites, flood control projects, etc. shall be permitted unless the project has been reviewed and approved by the appropriate Corps approval authority. If the proposed activity has the potential to modify or conflict with a Corps civil works authorized project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project. In addition to the Corps regulatory authorizations of this general permit, other Corps permissions may be needed for the project such as Corps Civil Works 408 permissions and/or Corps Real Estate permissions. Permittees shall not begin the activity until notified by the Corps that the activity may proceed under the general permit.

- 12) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration
- 13) If the opinion of the DE is that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest, the DE may require an individual permit on a case-by-case basis. The DE reserves the right to utilize discretionary authority such as described in 33 CFR 330.1(d) and 33 CFR 330.4 (e).
- 14) If, at any future date, the Iowa Department of Natural Resources or the Corps of Engineers determines that the bank stabilization obstructs or impairs navigation, or in any way infringes on the rights or interests of the public or any individual party, the permittee agrees to make necessary modifications to the project as determined by the Iowa Department of Natural Resources or the Corps of Engineers.

- 15) The project proponent must notify the appropriate public or private utility in advance of any work within 250 feet of an underground utility so that the utility is not damaged during construction activities.

D. Temporary Impacts/Restoration Requirements:

- 1) The permittee is required to replant all temporary construction right-of-way located within wetlands to the standards stated in the Rock Island District Regulatory Branch Wetland Mitigation and Monitoring Guidelines found on the Rock Island District's Website.
- 2) Side slopes of a newly constructed channel will be no steeper than 2H:1V and planted with permanent, perennial, native vegetation if not armored.
- 3) If jurisdictional wetlands will be excavated within the permit area, the permittee will side-cast and stockpile the topsoil (to 10-12 inches), if practicable and/or if the site conditions allow. The site must be returned to its pre-construction contours and elevations after construction to be considered a temporary impact. The site must also be reseeded and/or replanted with native vegetation. The use of the stockpiled topsoil is recommended to ensure the site has adequate nutrients and fertility to support the survival of the reseeded/replanted vegetation.

E. Mitigation:

- 1) If the permanent loss of wetland exceeds 0.10 acre or for stream losses greater than 300 linear feet or 0.03 acres, compensatory mitigation may be required and must follow the regulations published in the Federal Register dated April 10, 2008 under 33 CFR Parts 332 and 40 CFR Part 230 – Subpart J entitled “Compensatory Mitigation for Losses of Aquatic Resources,” (Mitigation Rule) and any such Corps of Engineers regulation/guidance that would supplement these mitigation requirements.
- 2) The amount of mitigation required will be determined during review for authorization under this permit as per the mitigation rule requirements. Mitigation must be adequate to offset unavoidable impacts or losses to regulated WOTUS. For all permanent stream losses greater than 300 feet or 0.03 acres, completion of the Iowa Stream Mitigation Method may be required to determine adequate compensatory stream mitigation. The DE has the final approval in determining the appropriate and practicable mitigation necessary. The discharge of fill material into WOTUS prior to DE approval of the mitigation plan is prohibited.

F. Historic Properties/Archaeological:

- 1) Section 106 consultation is not required when the DE determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). In cases where the DE determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places (National Register), the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) are met.
- 2) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of NHPA, permittees must provide the DE with the appropriate documentation to demonstrate compliance with those requirements
- 3) Non-federal permittees must submit information to the DE if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register, including previously unidentified properties. For such activities, the information must state which historic properties may be affected by the proposed work and include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer (SHPO) and/or Tribal Historic Preservation Officer (THPO), as appropriate, and the National Register (see 33 CFR 330.4(g)). The DE shall make a reasonable and good faith effort to ensure that appropriate identification efforts are carried out, which may include background research, consultation, history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the DE shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects, and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the DE either that the activity has no potential to cause effects, or that consultation under Section 106 of the NHPA has been completed.
- 4) The DE will notify the prospective permittee within 45 days of receipt of a complete application whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic

properties (see 36 CFR 800.3(a)). If NHPA Section 106 consultation is required, the non-Federal applicant cannot begin work until Section 106 consultation is completed.

- 5) Permittees should be aware that section 110k of the NHPA (16 U.S.C. 16470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, explaining the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

G. Endangered Species:

- 1) No activity is authorized under this RP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under Section 7 of the Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under this RP which may affect a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed to address the effects of the proposed activity on a listed species or critical habitat.
- 2) Federal permittees and their designated state agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the Corps with the appropriate documentation to demonstrate compliance with those requirements. The Corps will review the documentation and determine whether it is sufficient to address ESA compliance for the activity, or whether additional ESA consultation is necessary.
- 3) Non-federal permittees must provide the Corps with the appropriate

documentation to demonstrate compliance with the ESA. If the authorized activity may have the potential to affect any listed species or a designated critical habitat, or is in the vicinity of the project, or is located in designated critical habitat, permittee shall not begin work on the activity until notified by the DE that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that may affect Federally listed endangered or threatened species or designated critical habitat, the notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. The DE will determine whether the proposed activity may affect or will have no effect on listed species and designated critical habitat.

- 4) Authorization of an activity by this regional general permit does not authorize the taking of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. Fish and Wildlife Service (USFWS), both lethal and non-lethal takings of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the USFWS webpage.

H. Water Quality Certification: By letter dated TBD the Iowa Department of Natural Resources issued a Section 401 WQC for this RP.

<<<<< END OF PERMIT CONDITIONS >>>>>

Further information:

1. **Congressional Authorities:** You have been authorized to undertake the activity described above pursuant to:
 - (X) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
 - (X) Section 404 of the Clean Water Act (33 U.S.C. 1344).
 - () Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).
2. **Limits of this authorization.**
 - a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.
 - b. This permit does not grant any property rights or exclusive privileges.
 - c. This permit does not authorize any injury to the property or rights of others.
 - d. This permit does not authorize interference with any existing or proposed Federal project.
3. **Limits of Federal Liability.** In issuing this permit, the Federal Government does not assume any liability for the following:
 - a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
 - b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
 - c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
 - d. Design or construction deficiencies associated with the permitted work.
 - e. Damage claims associated with any future modification, suspension, or revocation of this permit.
4. **Reliance on Applicant's Data.** The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.
5. **Reevaluation of Permit Decision.** This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

- a. You fail to comply with the terms and conditions of this permit.
 - b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
 - c. Significant new information surfaces which the issuing office did not consider in reaching the original public interest decision. Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action, where appropriate. You will be required to pay for any corrective measures ordered by this office and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.
6. **Extensions.** General Condition 2 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below

Matthew Zehr
Chief, Rock Island District
Regulatory Branch

Date

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

Transferee

Date

CEMVR-RD-2025-0302

Expires

Fill Material Placed in Waters of the United States for
Bank Stabilization Activities in the State of Iowa
DEPARTMENT OF THE ARMY – Rock Island District



July 16, 2025 (DRAFT)

Ava Alford
Ava.L.Alford@usace.army.mil

Dear Ava Alford:

After reviewing your request for State 401 Water Quality Certification (Certification), the Iowa Department of Natural Resources (DNR) has issued the enclosed Certification. Please read the attached conditions carefully before beginning work on the project.

A copy of this Certification has been forwarded to the office of the U.S. Army Corps of Engineers as indicated below.

Please note:

1. Prior to construction, the permittee is responsible for securing such other permits or approvals as may be required by the DNR, federal, state, or local governmental agencies for the project activities described. Issuance of this certification does not relieve you of the responsibility to comply with all local, state and federal laws, ordinances, regulations or other applicable legal requirements.
2. The permittee is responsible for ensuring that whoever performs, supervises, or oversees any portion of the physical work associated with the construction of this project complies with all the terms and conditions of this Certification as well as the associated Section 404 Permit.

If you have any questions about the certification or attached conditions contained therein, my contact information is provided in the certification.

Sincerely,

Brandon Harland
Natural Resource Biologist

cc: Ava Alford, Department of the Army Corps of Engineers, Rock Island District (Ava.L.Alford@usace.army.mil)

IOWA DEPARTMENT OF NATURAL RESOURCES

SECTION 401 WATER QUALITY CERTIFICATION

Certification issued to:

Ava Alford
Ava.L.Alford@usace.army.mil

Project certified: U.S. Army Corps of Engineers, No. 2025-0302

Project Description: Activities required for bank stabilization projects.

Project Location: All waters of the United States in Iowa, within the regulatory boundaries of the Rock Island District.

The Iowa Department of Natural Resources (DNR) has issued this State 401 Water Quality Certification (Certification) pursuant to Section 401 {40 C.F.R. §121}. The U.S. Army Corps of Engineers requires state Certification before a Section 404 permit can be issued.

Subject to the attached conditions, incorporated by reference herein, the DNR has determined that a discharge from the proposed project will comply with water quality requirements of the state of Iowa {567 IAC 61}.

Prepared By/Date Executed: _____
Brandon Harland
Iowa DNR
brandon.harland@dnr.iowa.gov
515-954-9559
6200 Park Ave. Ste. 200, Des Moines, IA 50321

CONDITIONS

- (1) During construction and upon completion of the project, actions must be taken to prevent pollution affecting public health, fish, shellfish, wildlife, and recreation due to turbidity, pH, nutrients, suspended solids, floating debris, visible oil and grease, or other pollutants entering a water of the state. This condition will ensure permittees comply with Iowa's narrative water quality standards found at 567 IAC 61.3(2);
- (2) Equipment used in waters of the state shall be cleaned of all hazardous materials, pesticides, fuels, lubricants, oils, hydraulic fluids, or other construction-related, potentially hazardous substances before arriving on site. Wash water shall not be discharged into a water of the state. This condition will ensure permittees comply with Iowa's narrative water quality standards found at 567 IAC 61.3(2);
- (3) All cleared vegetative material shall be properly managed in such a manner that it cannot enter a water of the state and cause a violation of water quality requirements. This condition will ensure permittees comply with Iowa's narrative water quality standards found at 567 IAC 61.3(2);
- (4) All construction debris shall be properly managed in such a manner that it cannot enter a water of the state. This condition will ensure permittees comply with Iowa's narrative water quality standards found at 567 IAC 61.3(2);
- (5) Erosion shall be managed so that sediment is not discharged to a water of the state in a manner that causes a violation of water quality requirements. This condition will ensure permittees comply with Iowa's narrative water quality standards found at 567 IAC 61.3(2);
- (6) Riprap, treated lumber products, and temporary structures shall consist of clean material free of coatings of potentially hazardous substances. No asphalt or petroleum-based material shall be used as or included in material placed in any water of the state or within the high-water table. This condition will ensure permittees comply with Iowa's narrative water quality standards found at 567 IAC 61.3(2); and
- (7) Stockpiled dredged materials on the shore shall be managed so that sediment is not discharged to a water of the state in a manner that causes a violation of water quality requirements. This condition will ensure permittees comply with Iowa's narrative water quality standards found at 567 IAC 61.3(2).
- (8) Hydraulically dredged material shall be managed to ensure the return water meets water quality requirements.