US Army Corps of Engineers

Buffalo District
Great Lakes and Ohio River Division

Old Fort Niagara, Youngstown, NY

Continuing Authorities Program Section 14

P2/Project Number: 468121

Review Plan – Decision Document

PREPARED BY: [redacted]
Project Manager
USACE, Buffalo District

RECOMMENDED BY: [redacted]
Chief, Planning Management Team
USACE, Buffalo District

ENDORSED BY: [redacted]
Chief, Planning Branch
USACE, Buffalo District
Review Management Organization (RMO)

APPROVED BY: [redacted]
District Commander
USACE, Buffalo District

APPROVAL DATE: 24 February 2021

1. PURPOSE, AUTHORITY, STUDY DESCRIPTION, AND PRODUCTS

a. Purpose. This review plan defines levels and scopes of review required for the feasibility phase products for this single purpose Section 14 of the Continuing Authorities Program (CAP), emergency shoreline protection project at Old Fort Niagara, Village of Youngstown, Niagara County, NY. The Risk Management Organization (RMO) for this review plan is LRB.

b. Authority. Continuing Authorities Program (CAP). The study is authorized by Section 14 of the 1946 Flood Control Act (P.L. 79-526), as amended. This authority authorizes the U.S. Army Corps of Engineers (USACE) to develop and construct streambank and shoreline protection projects to protect endangered highways, highway bridge approaches, public works facilities such as water and sewer lines, churches, and public and private nonprofit public facilities. Each project is limited to a federal cost of $5,000,000, and must be economically justified, environmentally sound, and technically feasible.

c. Study Description. The study investigates a shoreline erosion problem at Old Fort Niagara within the Fort Niagara State Park. Erosion is threatening the seawall along the north shoreline where the Niagara River flows into Lake Ontario. This wall protects the "French Castle" built in 1726 and the North Redoubt, built in 1771. Both the seawall and the building that sits above it are threatened by continued erosion. Previous USACE studies analyzing the erosion problem date back to 1968. Erosion and other problems at the Old Fort Niagara site have escalated due to high water levels and storms along Lake Ontario in 2017.

From an engineering feasibility standpoint, the expected requirements of the project are not complex and present few technical challenges (i.e., a rubblemound revetment placed immediately offshore of the eroding earthen bluffs would likely provide a suitable alternative). Despite the low technical complexity, however, the project presents challenges associated with the historic nature of the masonry seawall and the presence of an offshore munitions dump used by the U.S. Army from approximately 1900 to 1934. To address the concerns associated with impacts to historic structures, the project will require early and continuous coordination with the New York State Historic Preservation Office. To address the HTRW risks associated with the possible presence of unexploded ordnance (UXO), munitions and explosives of concern (MEC), and/or munitions debris (MD), the project will require early and continuous coordination with the program manager overseeing the DERP-FUDS program encompassing this area of concern. Although a 2009 Site Inspection conducted through this program reported no evidence of MEC or MD, the program recommended a future DERP-FUDS Remedial Investigation/Feasibility Study. During the Section 14 Feasibility Study phase, the project delivery team (PDT) will work with the FUDS program manager and vertical team to determine the appropriate course of action for the recommended project. A UXO scan was performed in July 2020. The conclusion stated, "Of the area investigated, no evidence of MEC, Material Potentially Presenting an Explosive Hazard (MPPEH) or MD was discovered." The recommendation stated, "Given the historical activities that took place at the site, the information obtained from the Site Investigation Report dated 2009 and the information resulting from this survey and current DoD MEC guidance, it is the recommendation of this office that the site be classified as a "Low probability" for

encountering MEC. It is recommended that all site workers receive site specific 3R's awareness safety brief and that "on-call" construction support be in place for all intrusive activities. 3R's information can be found at this website https://www.denix.osd.mil/uxo/".

Additionally, the impacts of climate preparedness and resiliency on Lake Ontario coastal areas are a consideration of any fully developed study alternative. The PDT evaluation will consider climate preparedness and resiliency to qualitatively assess long-term risks to project performance.

d. The New York State Office of Parks, Recreation and Historic Preservation – Western District (NYSOPRHP) has expressed their intent to partner with USACE to complete a cost shared Feasibility Study with a letter of intent dated 20 January 2021. The Old Fort Niagara Association, which leases the Old Fort Niagara site from NYSOPRHP, has also indicated their support for the Feasibility Study in the study area.

e. Products.

Table 1. List of Products to Be Prepared and Reviewed

Product / Document	Prepared By	Type of Review to be Performed			
		DQC	ATR	Type I IEPR	Policy / Legal
Detailed Project Report (DPR) and Environmental Assessment (Main Report / Integrated DPR/EA)	In-house Resources	X	X		X
Environmental Appendix	In-house Resources	X	X		X
Real Estate Plan Appendix	In-house Resources	X	X		X
Coastal Engineering Appendix	In-house Resources	X	X		X
Geotechnical Engineering Appendix	In-house Resources	X	X		X
Cost Appendix	In-house Resources	X	X		X
HTRW Assessment (Phase 1 ESA)	In-house resources	X	X		X
Environmental Coordination Appendix Including: • Summary of Comments & Responses from Public and Agency Review • FONSI • Cultural Resources Report	In-house Resources	X	X		X

2. REVIEW REQUIREMENTS

a. Types of Review. The feasibility phase activities and documents are required to be reviewed in accordance with ER 1110-1-12 and EC 1165-2-217. Based upon the factors under each heading, this study will undergo the reviews identified and described below.

(1) District Quality Control (DQC): DQC procedures will be performed and formally documented for all study products, including supporting documents.

- The District will perform and manage DQC procedures in accordance with the District DQC process.
- DQC will be documented with a summary certification.
- Supervisors within each area of responsibility will assign appropriate, qualified staff to perform QC on their respective products. Personnel performing QC shall have the necessary expertise to address compliance with Corps policy.
- The DQC team for this study is listed on the last page of the review plan.

(2) Agency Technical Review (ATR): ATR will be scaled to a level commensurate with the risk and complexity of the products to be reviewed. The ATR will assess whether the analyses presented are technically correct and comply with published USACE guidance, and that the document explains the analyses and results in a reasonably clear manner for the public and decision makers. ATR is mandatory for all decision documents (including supporting data, analyses, environmental compliance documents, etc.).

- ATR is managed within USACE by the designated RMO and is conducted by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product.
- ATR teams will be comprised of senior USACE personnel
- ATR reviewers in the Plan Formulation, Environmental, Economic, and Cultural Resources disciplines must be certified by their respective Planning sub-CoP
- ATR reviewers in the Engineering & Construction discipline must be certified by the Corps of Engineers Reviewer Certification and Access Program (CERCAP).
- The team lead will be from outside LRD.
- The ATR review will be documented using DrChecks, and an ATR Summary Report and certification will be completed.

Table 2b. ATR Technical Disciplines and Expertise Required

ATR Disciplines	Expertise Required	Justification / Rationale
ATR Lead- Plan Formulation	The ATR lead should be a senior professional preferably with experience in preparing CAP Section 14 decision documents and conducting ATR. This reviewer will be responsible for reviewing all plan formulation components of the feasibility study. The lead should also have the necessary skills and experience to lead a virtual team through the ATR process. The ATR lead may also serve as a reviewer for a specific discipline.	Coordinate all ATR activities.

Environmental (NEPA)	The Environmental reviewer should be familiar with NEPA related to shoreline protection projects.	The Environmental Evaluation is anticipated to result in a FONSI.
Cultural Resources	The Cultural Resources reviewer should be a certified ATR reviewer for Archaeology.	Old Fort Niagara is a historic site.
Coastal Engineer & Climate Preparedness and Resiliency	At least one member of an ATR Team for inland hydrology and coastal studies, designs, and projects must be certified by the Climate Preparedness and Resilience CoP in CERCAP. The Coastal Design reviewer should have experience in the design of coastal structures such as breakwaters and/or seawalls. This reviewer should have an expertise in coastal engineering on the Great Lakes.	Required by EC 1165-2-17; alternatives can be affected by future climate conditions; a climate analysis we be used to determine resiliency. Proposed alternative consists of coastal structures and engineering.
Cost Engineering Reviewer	Cost MCX Staff or Cost MCX Pre-Certified Professional as assigned by the Walla Walla Cost Engineering Mandatory Center of Expertise with experience preparing cost estimates for Section 14 cost estimates. Must be Certification and Access Program (CERCAP) certified.	Required by EC 1165-2-17
Disciplines not anticipated to be needed on ATR team		
Structural Design Engineering	Expertise not anticipated to be needed on ATR team.	No structural alternatives expected to be considered.
Economics	Expertise not anticipated to be required on ATR Team	No Economics review required.
Hydrology and Hydraulic Engineering	Expertise not anticipated to be required on ATR Team	No H&H required.
HTRW	HTRW not anticipated to be needed on ATR team.	Risks of HTRW impact to project low. HTRW not anticipated.
Geotechnical and Civil Design Engineering	Expertise not anticipated to be required on ATR Team	Due to the coastal nature of the project, review of the coastal structures of the project will be reviewed by coastal engineer, not a geotechnical or civil design engineer.
Real Estate Reviewer	Expertise not anticipated to be required on ATR Team	Low risk and complexity may be more appropriately accomplished in-house via DQC) Great Lakes Real Estate.

(3) Type I Independent External Peer Review (IEPR): A Type I IEPR is not required based on the mandatory triggers outlined in the Memorandum for Major Subordinate Command (MSC) and District Commanders dated April 05, 2019; the memorandum provides interim guidance on streamlining IEPR for improved civil works product delivery. Paragraph 4 states a project study may be excluded Type I IEPR if the project does not meet any of the three mandatory IEPR triggers.

All CAP projects are excluded from Type I IEPR except those conducted under Section 205 and Section 103, or those projects that include an EIS or meet the mandatory triggers for Type I IEPR.

This feasibility study does not meet any of the three mandatory IEPR triggers for the following reasons:

- The estimated total cost of the project, including mitigation costs, is not greater than $200 million.
- The Governor of New York has not requested a peer review by independent experts.
- The study is not controversial due to significant public dispute over size, nature, or effects of the project or the economic or environmental costs or benefits of the project.

When none of the three mandatory triggers for IEPR are met, MSC Commanders have the discretion to conduct IEPR on a risk-informed assessment of the expected contribution of IEPR to the project. An IEPR would not provide additional benefit to the study for the following reasons:

a. This study does not include the development or use of any novel methods.
b. This project does not pose likely threats to health and public safety.
c. There is no anticipated inter-agency interest.
d. Buffalo District has not received a request from the head of any Federal or State agency for an IEPR.
e. The proposed project is not anticipated to have unique construction sequencing or a reduced or overlapping design construction schedule.
f. This project report is not likely to contain influential scientific information or be a highly influential scientific assessment.

(4) Type II Independent External Peer Review (IEPR): Type II IEPR, or Safety Assurance Review (SAR), are managed outside the USACE and are conducted on design and construction activities for hurricane, storm, and flood risk management projects or other projects where existing and potential hazards pose a significant threat to human life. **Since this document does not involve life safety concerns, a Type II IEPR would not be considered**.

(5) Policy and Legal Review: All decision documents will be reviewed for compliance with law and policy. Guidance for policy and legal compliance reviews is addressed in Appendix H, ER 1105-2-100 and EP 1105-2-58 Detailing the CAP Delegation Authority.

In reviewing Appendix H, ER 1105-2-100, it defines what needs to be reviewed by the District and Division for policy and legal compliance and what documents need to be prepared to document that. Even with CAP Delegation, the requirements for "Policy and Legal Review" that we will follow are still defined in Appendix H, ER 1105-2-100. The 01 March 2019 EP 1105-2-58 defining CAP Delegation simply delegates the requirement to do all of this to the District.

(6) Public Participation.

a. A public involvement program will be included to satisfy NEPA requirements and solicit public and government agency input.
b. The District shall contact agencies with regulatory review for coordination as

required by applicable laws and procedures.

c. The District will review comments resulting from public and agency review and will provide the ATR team copies of public and agency comments and responses.

3. MODEL CERTIFICATION OR APPROVAL. The following models may be used to develop the decision documents:
EP 1105-2-58 specifies that approval of planning models is NOT required for CAP projects, but planners should utilize certified models if they are available.

The following models may be used to develop the decision document:

Table 3a. Planning Models		
Model Name and Version	Model Description and How It Will Be Used	Certification / Approval Status & Date
IWR Planning Suite Version 2.0.9	Cost Effectiveness, Incremental Cost Analysis. The Institute for Water Resources Planning Suite (IWR-PLAN) is a decision support software package that is designed to assist with the formulation and comparison of alternative plans. While IWR-PLAN was initially developed to assist with environmental restoration and watershed planning studies, the program can be useful in planning studies addressing a wide variety of problems. IWR-PLAN can assist with plan formulation by combining solutions to planning problems and calculating the additive effects of each combination, or "plan." IWR-PLAN can assist with plan comparison by conducting cost effectiveness and incremental cost analyses, identifying the plans which are the best financial investments and displaying the effects of each on a range of decision variables. The ecological habitat units calculated using the Habitat Evaluation Process will be used as inputs in IWR-PLAN to evaluate the benefits associated with each project alternative.	Certified

Table 3b. Engineering Models		
Model Name and Version	Model Description and How It Will Be Used	Approval Status
MCACES	Microcomputer-Aided Cost Estimation System; Used to generate detailed cost estimates for each alternative.	Approved
CMS Wave/Flow Coastal Model	Coastal Modeling System (CMS) SMS Ver.11.1; CMS-WAVE used to simulate 2D wave spectral transformation. CMS-WAVE coupled with CMS-Flow includes capabilities to compute both hydrodynamics and sediment transport as bed load, suspended load, and total load, and morphology change.	Classified as CoP Preferred

4. REVIEW SCHEDULE AND BUDGET. The schedule and budgets for reviews are shown in below table. This Review Plan is an integral component of the Project Management Plan (PMP).

Table 3. Product and Review Schedule				
Product(s) to undergo Review	Review Level	Start Date	Finish Date	Budget ($)
Draft Detailed Project Report and Integrated Environmental Assessment (DPR/EA) & Appendices	District Quality Control	26 OCT 20	01 DEC 20	$[redacted]
Draft DPR/EA & Appendices	Agency Technical Review	03 DEC 20	20 JAN 21	$[redacted]
Draft DPR/EA & Appendices	LRB Policy and Legal Review	05 FEB 21	24 FEB 21	$[redacted]
Draft DPR/EA & Appendices	Public and Agency Review	04 MAR 21	02 APR 21	$[redacted]
Draft DPR/EA & Appendices	Final District Quality Control	03 MAY 21	07 MAY 21	$[redacted]
Draft DPR/EA & Appendices	Final LRB Policy and Legal Review	10 MAY 21	21 MAY 21	$[redacted]

ATTACHMENT 1 – Contacts

Function	Name (Last, First)	Phone	Office
RMO Contact	[redacted]	[redacted]	CELRB-PML
MSC Contact – District Support Program Manager	[redacted]	[redacted]	CELRD-PDS
DERP FUDS Program Manager	[redacted]	[redacted]	CENAE-PPM

PROJECT DELIVERY TEAM			
Function/Discipline	Name (Last, First)	Phone	Office
Sponsor; Deputy General Manager	[redacted]	[redacted]	Western District, New York State Office of Park, Recreation, and Historic Preservation
Project Manager (Lead)	[redacted]	[redacted]	CELRB-PMP-M
Planner	[redacted]	[redacted]	CELRB-PML-P
Biologist	[redacted]	[redacted]	CELRB-PML-E
Civil/Structural Engineer	[redacted]	[redacted]	CELRB-TDD-S
Project Management Specialist	[redacted]	[redacted]	CELRB-PMP-O
Geotechnical Engineer	[redacted]	[redacted]	CELRB-TDD-C
Coastal Engineer	[redacted]	[redacted]	CELRB-TDD-C
Environmental Engineer	[redacted]	[redacted]	CELRB-TDE-E
Real Estate	[redacted]	[redacted]	CELRE-RE
Legal Counsel	[redacted]	[redacted]	CELRB-OC
Archaeologist (Detroit District)	[redacted]	[redacted]	CELRE-PL-E
Cost/Project Engineering	[redacted]	[redacted]	CELRB-TDD-E
Program Analyst	[redacted]	[redacted]	CELRB-PMP-O
* LRB can support basic cultural resources coordination tasks. If significant cultural resources concerns are identified during the feasibility phase, LRB will coordinate with an Archeologist from another District to support the study.			

DISTRICT QUALITY CONTRAL (DQC) TEAM			
Function/Discipline	Name (Last, First)	Phone	Office
DQC Lead	[redacted]	[redacted]	CELRB-PML
Plan Formulation	[redacted]	[redacted]	CELRB-PML-P
Env. Analysis & Cult. Resources*	[redacted]	[redacted]	CELRB-PML-E
Civil/Structural	[redacted]	[redacted]	CELRB-TDD-S
Geotechnical/Coastal Engineer	[redacted]	[redacted]	CELRB-TDD-C
Project Management	[redacted]	[redacted]	CELRB-PMP-O
Cost Engineer	[redacted]	[redacted]	CELRB-TDD-E
Environmental Engineer	[redacted]	[redacted]	CELRB-TDE-E
Real Estate	[redacted]	[redacted]	CELRE-RE

AGENCY TECHNICAL REVIEW (ATR) TEAM			
Function/Discipline	Name (Last, First)	Phone	Office
ATR Lead/Plan Formulation	[redacted]	[redacted]	CENAE-PDP
Environmental	[redacted]	[redacted]	CENAB-PL
Cultural Resources	[redacted]	[redacted]	CENAE-PDE
Cost Engineering	[redacted]	[redacted]	CENWW-ECE
Coastal Engineer and Climate Preparedness and Resilience	[redacted]	[redacted]	CENAE-EDW