



**US Army Corps
of Engineers®**

Public Notice

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Notice No: Buffalo Confined Disposal Facility #4 Repair

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OPERATIONS AND MAINTENANCE

BUFFALO CONFINED DISPOSAL FACILITY #4 WEST PERIMETER DIKE REPAIR CITY OF BUFFALO, ERIE COUNTY, NEW YORK

This Public Notice has been prepared pursuant to Section 404(a) of the Clean Water Act (CWA). It is being administered in conformance with U.S. Army Corps of Engineers (USACE) regulation, "Practice and Procedure: Final Rule for Operation and Maintenance of Army Corps of Engineers Civil Works Projects involving the Discharge of Dredged Materials into Waters of the United States or Ocean Waters," 33 Code of Federal Regulations (CFR) 337.1. The purpose of this public notice is to specify what dredged or fill materials would be discharged into waters of the United States by implementation of the proposed action, advise all interested parties of the proposed project, and to provide an opportunity to submit comments or request a public hearing.

The USACE, Buffalo District plans to repair the Buffalo CDF #4 West Perimeter Dike in the City of Buffalo, Erie County, New York. Buffalo CDF #4 is located at the southern end of Buffalo Harbor adjacent to the South Entrance Channel (Figure 1). Buffalo CDF #4 was constructed to safely dispose of and store sediments that are removed from the federal navigation channels at the Buffalo Harbor project and surrounding areas during routine maintenance dredging operations. Buffalo CDF #4 was completed in June 1977 by building a stone perimeter dike from the Lake Erie shoreline south of the Outer Harbor South Entrance Channel to the lakeside end of the South Entrance Arm Breakwater. Confined Disposal Facility #4 has an estimated capacity of 6.9 million cubic yards and is currently about half filled. The 3,713-foot-long West Perimeter Dike is composed of multiple stone layers (Figures 2-3). A filter stone layer extends from the lake bottom upward to elevation -2.5 feet Low Water Datum (LWD) and a single continuous row of steel sheet pile extends downward from the dike crest at +15 feet LWD through the filter stone to elevation -9 feet LWD.

Since completion of its construction, the structural integrity of CDF #4 has deteriorated. Storms

have caused extensive damage to CDF #4 requiring a comprehensive repair of the stone dike wall on the western side of the structure. Vertical displacement of the steel sheet pile cutoff wall led to completion of remedial grouting in 2010. Deterioration and displacement of the stone armoring structure has also occurred posing a risk to long-term containment of the sediments and leading to the proposed second phase of repair.

The proposed repair for the Buffalo Harbor CDF #4 West Perimeter Dike consists of a rubblemound overlay with a new crest elevation of 589.2 feet International Great Lakes Datum 1985 (IGLD85) (+20.0 feet LWD), which is +5.0 feet higher than what is presented in the as-built design from 2011 (+15.0 feet LWD) from Station -4+00 to Station 29+50. The new crest elevation is necessary for structural stability of the rubblemound overlay and reduction of wave overtopping during significant storm and seiche events.

The repair plan is broken down into five legs with different priorities (options). The armor stone for each leg will range from 8.6-19 tons. Underlayer stone for each leg will range from 1,140-3,800 pounds, while the stability berm stone will consist of New York State Department of Transportation (NYSDOT) 733-2102 stone filling (light). Table 1 breaks down the stone tonnage for each repair. Leg 1 (Option E) spans 400 feet, beginning at Station -4+00.00 and ending at Station 0+00.00. Leg 2 (Option D) spans 650 feet, beginning at Station 0+00.00 and ending at Station 6+50.00. Leg 3 (Option A) spans 575 feet, beginning at Station 6+50.00 and ending at 12+25.00. Leg 4, which is the base of the repairs, spans 650 feet, beginning at Station 12+25.00 and ending at 18+75.00. Leg 5 has two options: Leg 5 Option B would begin at Station 18+75.00 and end at 23+50.00. This repair would span 475 feet. Leg 5 Option C would span 600 feet, beginning at Station 23+50.00 and ending at Station 29+50.00.

The repair plan also includes a rubblemound wrap-around (tie-in) of the South Entrance Arm Breakwater of the structure (Station 28+50) and a tie-in at Station -4+00 and at existing crest elevation of +15.0 feet LWD. The proposed repairs do not require excavation. The new structure will rest on the existing structure while the added stability berm comprised of NYSDOT 733-2102 stone filling (light) will rest on the existing lakebed. The added stability berm will extend approximately 60 feet lakeward of the existing toe, or 190 feet lakeward from the existing baseline of the structure.

Table 1: Repair tonnage per segment.

Priority	Segment	Station	Length of Leg (feet)	Armor Stone Tonnage	Underlayer Stone Tonnage	Stability Berm Tonnage
Option E	Leg 1	-4+00 - 0+00	400	6,142	572	0.0
Option D	Leg 2	0+00 - 6+50	650	24,587	1,165	0.0
Option A	Leg 3	6+50 - 12+25	575	24,024	3,280	11,054
Base	Leg 4	12+25 - 18+75	650	25,089	2,365	23,658
Option B	Leg 5	18+75 - 23+50	475	19,250	2,420	19,261
Option C	Leg 5	23+50 - 29+50	600	23,101	4,085	25,528

The proposed project may result in minor, localized, and short-term increased turbidity in Buffalo Harbor (Lake Erie) during project construction. To avoid and minimize impacts to the spawning, nursery, and feeding activities of indigenous fish species, the USACE would adhere to the in-water work restricted dates specified in the New York State Department of Environmental Conservation (NYSDEC) Clean Water Act Section 401 Water Quality Certification (WQC), as appropriate. Temporary effects to local fish populations and benthic organisms in the immediate project area could occur. Any such impacts are expected to be negligible. Local fish populations are expected to repopulate the area soon after construction is complete. In the long-term, the armor stone and stone filling would be expected to provide minor improvements to fish habitat by providing increased interstitial space between stones, which would provide feeding and resting habitat for aquatic organisms.

The proposed project is a maintenance activity with no more than minimal impacts to restore the West Perimeter Dike of the Buffalo Harbor CDF #4 and prevent contained sediment laden water from releasing into the Buffalo Harbor. The CDF repairs are tentatively scheduled to occur in the summer of 2025.

Overall, the proposed CDF #4 repair project is not expected to result in any significant adverse environmental impacts.

Pursuant to USACE regulations, WQC from the NYSDEC is required for discharges into the waters of the United States. Therefore, a copy of this public notice has been provided to NYSDEC requesting WQC, or waiver thereof, for the proposed CDF repairs.

There are no listed historic properties or properties determined as being eligible for listing in the National Register of Historic Places that would be affected by this project. Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, the USACE determined that the recommended plan has no effect on historic properties. Coordination with the New York State Historic Preservation Office (SHPO) has been completed. A response was received on December 13, 2023 from NYSHPO stating, “based upon this review, it is the opinion of the New York SHPO that no historic properties, including archaeological and/or historic resources, will

be affected by this undertaking.”

Pursuant to Section 7 of the Endangered Species Act of 1973, as amended, the USACE determined that the recommended plan would have no effect on federally listed species or their designated critical habitat. A letter was sent to the NYS USFWS Field office on December 11, 2023, documenting the effects determination. In a letter dated January 3, 2024, the USFWS concurred with this determination.

This work would be undertaken in a manner consistent, to the maximum extent practicable, with the New York State Department of State (NYSDOS) Coastal Zone Management Program. A Coastal Management Program federal consistency determination has been submitted to the NYSDOS documenting this determination.

Any interested parties and/or agencies desiring to express their views concerning the proposed project may do so by filing their comments, in writing, no later than 30 days from the date of this notice. Any person who has an interest which may be affected by the proposed project may request a public hearing. The request must be submitted in writing to the undersigned within 30 days of the date of this public notice. The request must clearly set forth the interest which may be affected, and the manner in which the interest may be affected, by this activity.

This activity is being coordinated with the following agencies, as well as other appropriate federal, state and local agencies and organizations:

New York State Department of Environmental Conservation
New York State Historic Preservation Office
New York State Department of State
U.S. Coast Guard
U.S. Department of the Interior, Fish and Wildlife Service
U.S. Environmental Protection Agency

Interested parties are encouraged to contact the USACE - Buffalo District with their comments regarding the proposed Buffalo CDF #4 repair project. Please review this public notice and send your comments in writing within 30 days to the following e-mail address:

BuffaloCDF4Repair@usace.army.mil

or via mail to:

U.S. Army Corps of Engineers - Buffalo District
Environmental Analysis Team
478 Main Street
Buffalo, NY 14202
ATTN: Environmental Analysis – Buffalo CDF #4 Repair

Figures

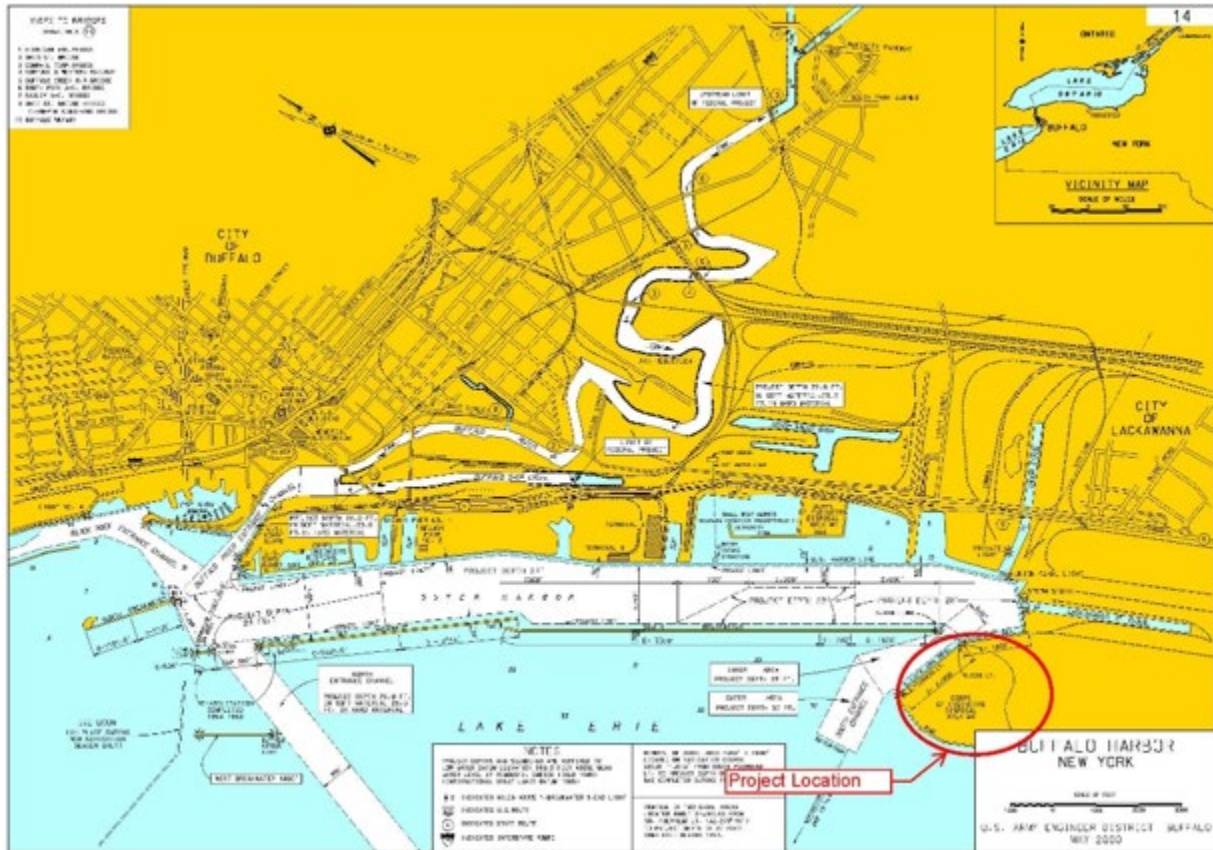


Figure 1: Buffalo CDF #4 location.



Figure 2: Buffalo CDF #4 West Perimeter Dike Location.

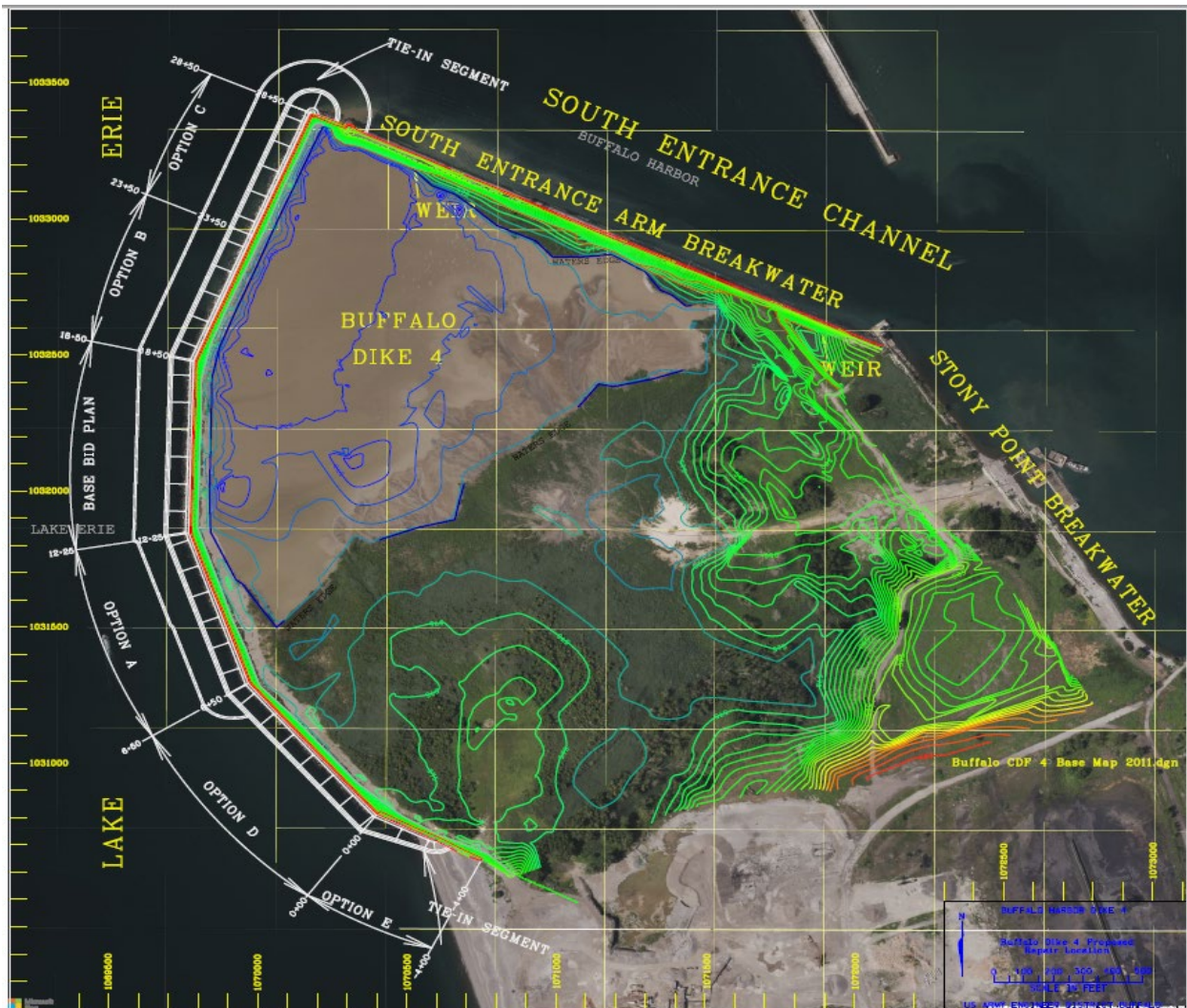


Figure 3: Buffalo CDF #4 repair legs.

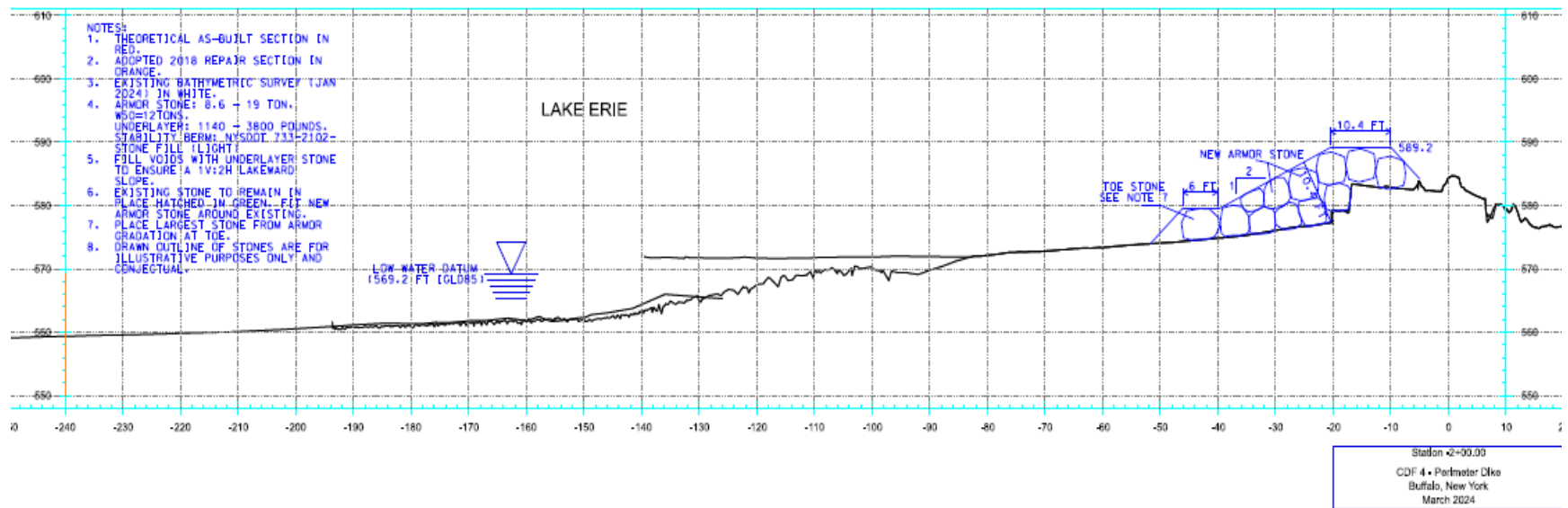


Figure 4: Plan view cross-section Station -2+00.

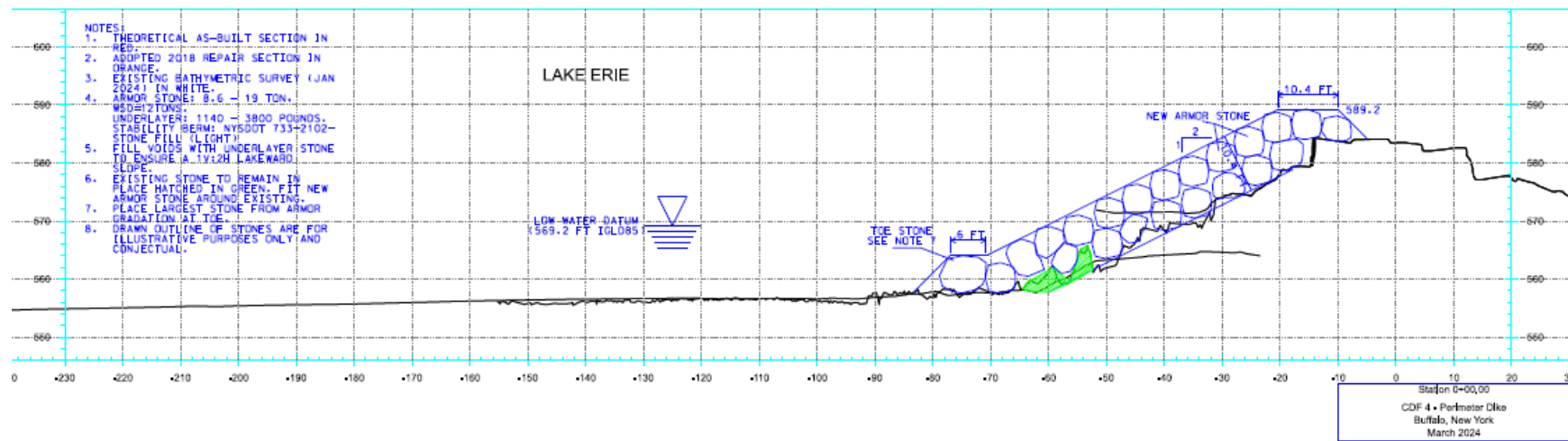


Figure 5: Plan view cross-section Station 0+00.

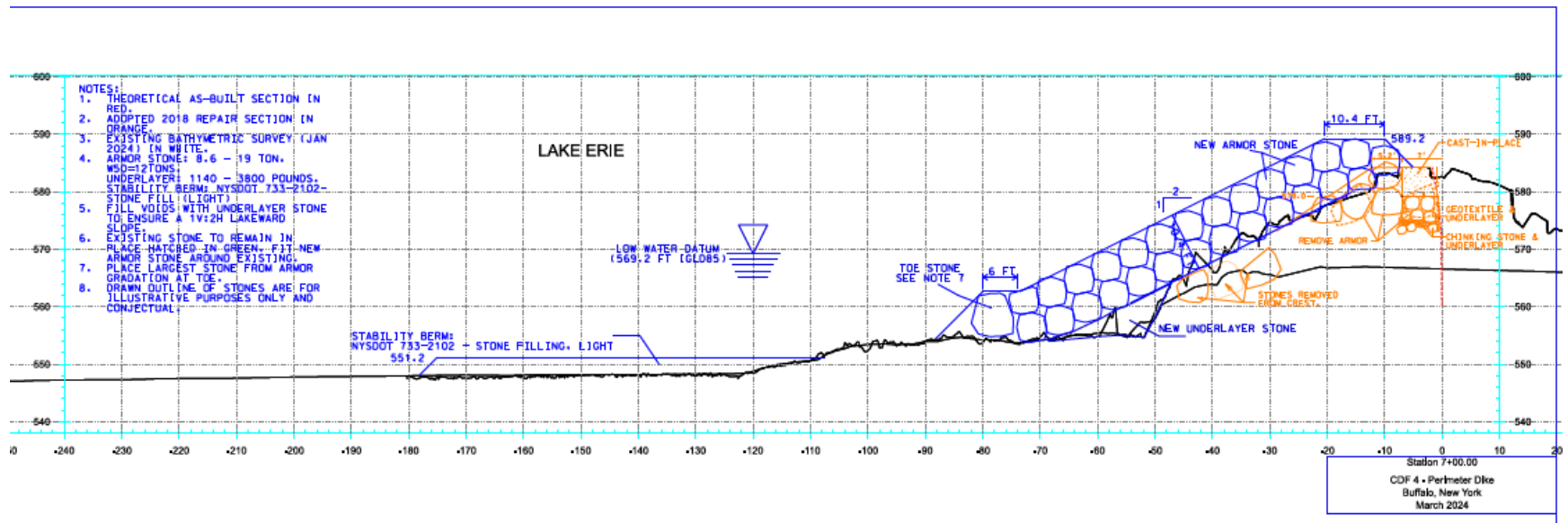


Figure 6: Plan view cross-section Station 7+00.

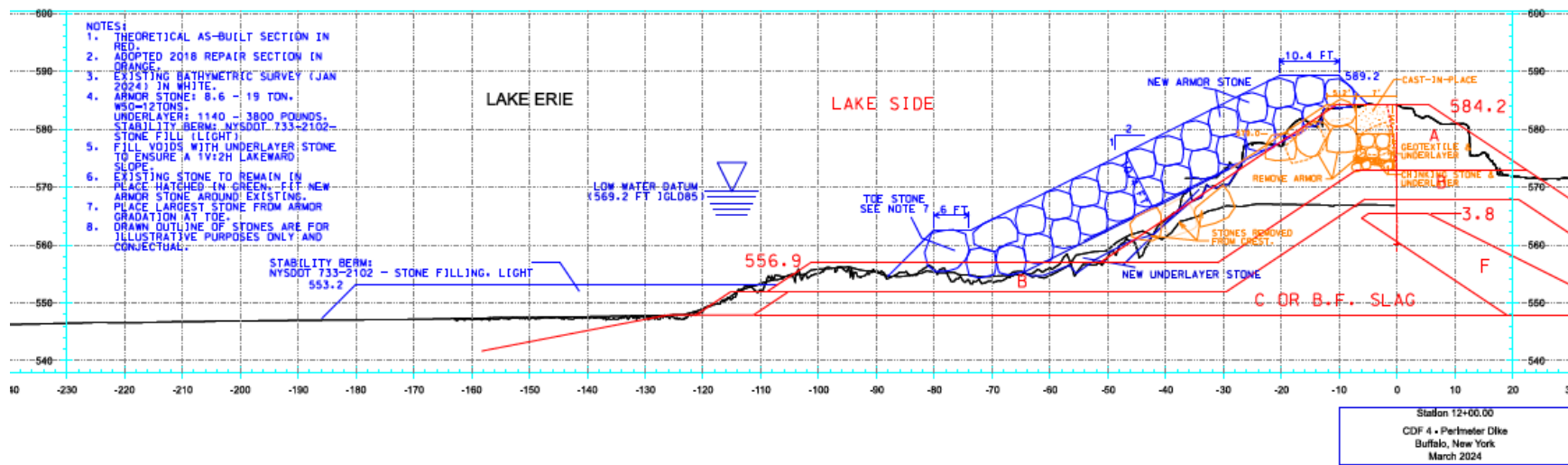


Figure 7: Plan view cross-section Station 12+00.

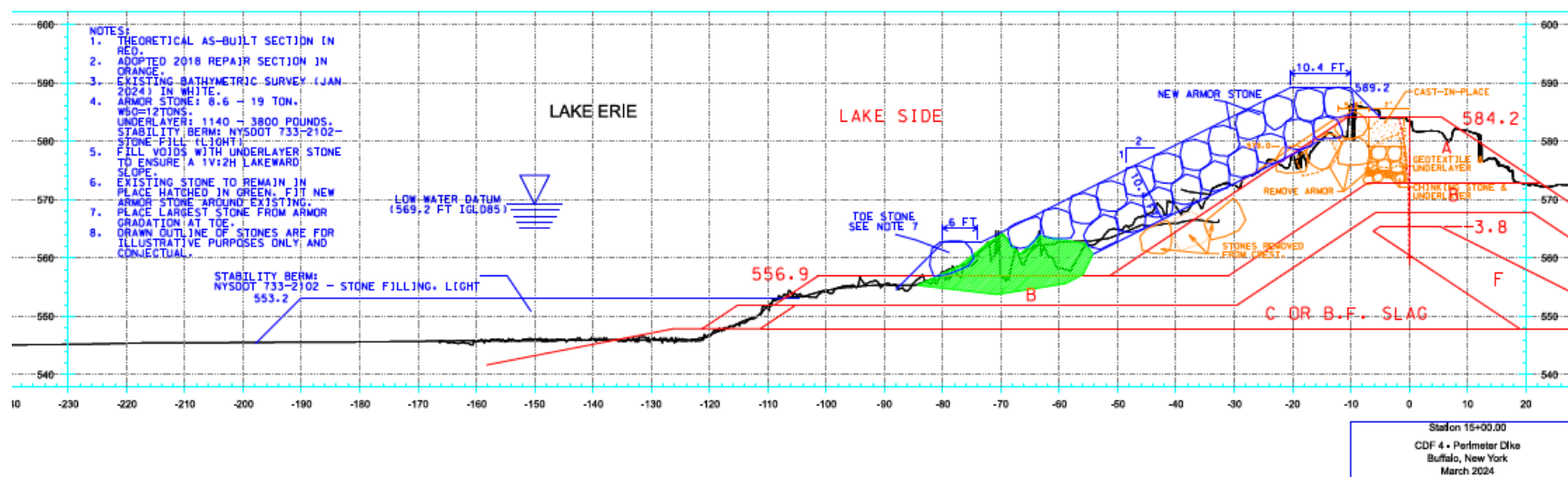


Figure 8: Plan view cross-section Station 15+00.

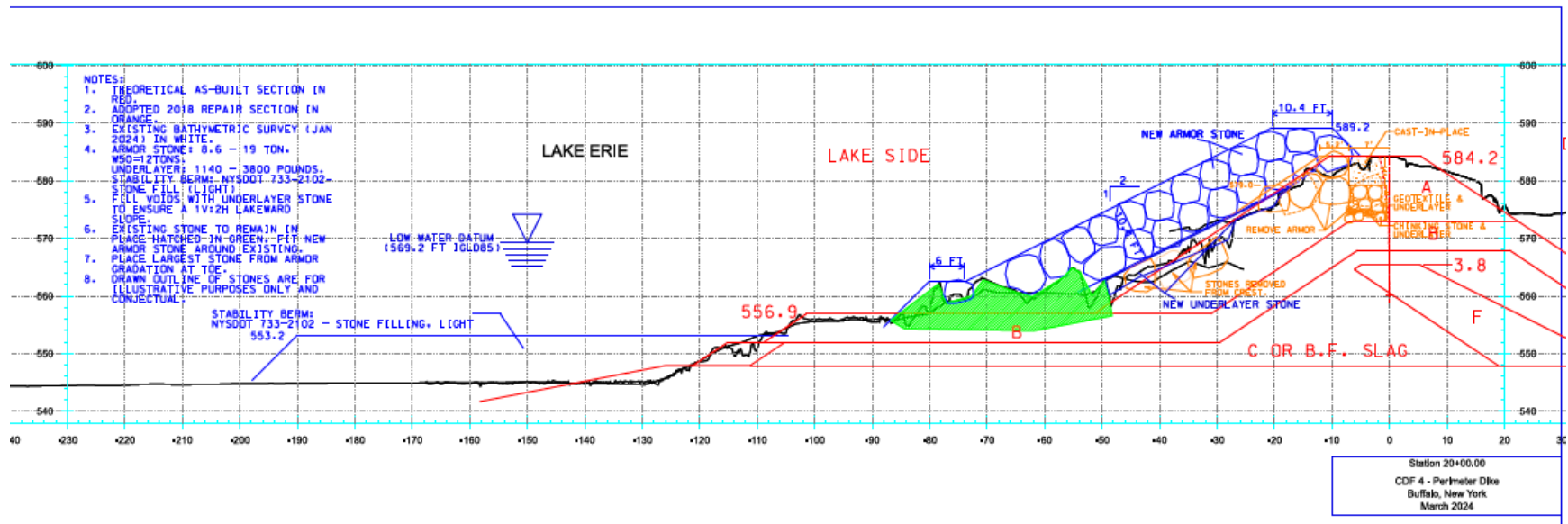


Figure 9: Plan view cross-section Station 20+00.

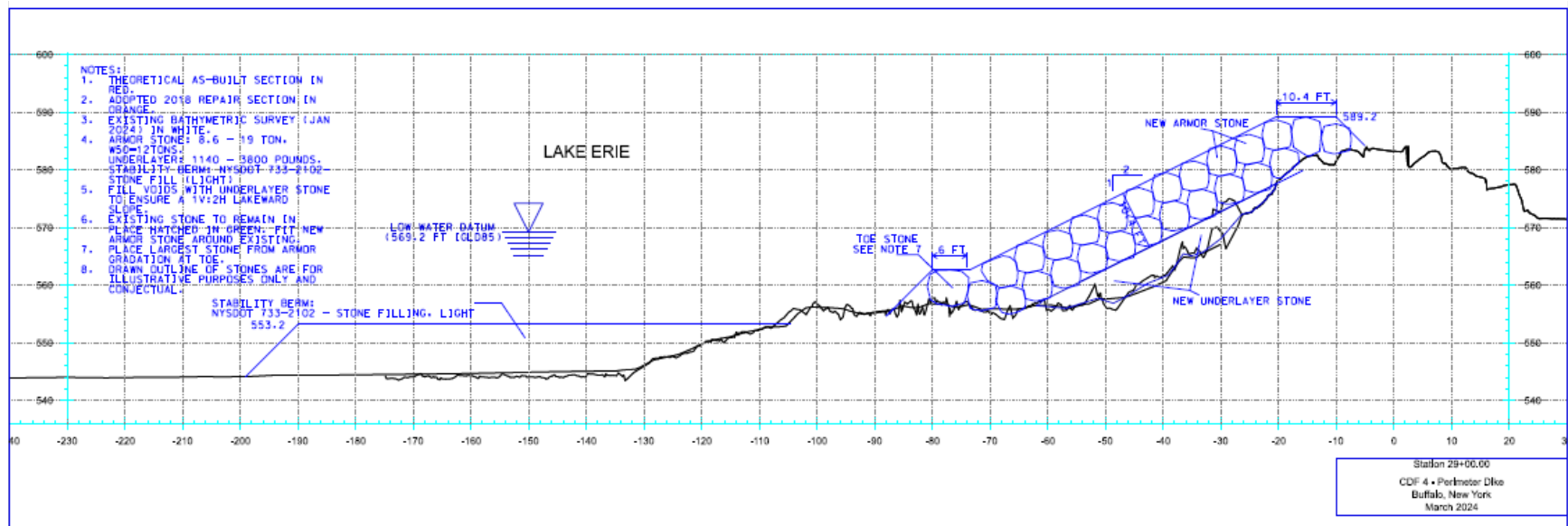


Figure 11: Plan view cross-section Station 29+00.