



**US Army Corps
of Engineers®**

APPENDIX I: SOCASTEE WEIR REMOVAL SCOPE OF WORK

WACCAMAW RIVER,

HORRY COUNTY, SOUTH CAROLINA

**FLOOD RISK MANAGEMENT STUDY INTEGRATED
FEASIBILITY REPORT AND ENVIRONMENTAL ASSESSMENT**

MARCH 2026

MAIN REPORT SUMMARY

The Integrated Feasibility Report and Environmental Assessment (FR/EA), that this appendix addresses, details a collaborative study by the U.S. Army Corps of Engineers (USACE) and Horry County, South Carolina. It is aimed at reducing existing and future flood risks to communities and transportation infrastructure within the Waccamaw River Basin, with a focus on Horry County. The study identifies four key flood impact areas: Longs & Red Bluff, Conway, Bucksport, and Socastee.

The flood impacts in each of these areas were independent of each other, so solutions could be evaluated self-reliantly, making any proposed alternative plans separable. The study considered a range of structural, non-structural, and nature-based solutions while incorporating public feedback gathered during meetings. An environmental analysis was completed, and a Finding of No Significant Impact is included within the main report. The document completed a public review and comment period while also undergoing internal agency reviews and adapted to those concerns and suggestions. In addition to historical flooding, the report acknowledges the flooding event caused by Hurricane Debby in August 2024 during this study, and its impact was assessed to further inform the study's conclusions.

The Recommended Plan, based on an evaluation of alternatives, includes two separable elements that are incrementally justified: Relief Bridges (cross drains) in the Conway flood impact area and Barrier Removal in the Socastee flood impact area. The Recommended Plan is classified as the National Economic Development Plan and is also the plan that maximizes net comprehensive benefits. No alternatives were justified for Federal investment for the Longs & Red Bluff and Bucksport flood impact areas. This Appendix provides detailed cultural information to support these recommendations.

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**US Army Corps
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Charleston District

WACCAMAW RIVER FRM STUDY WEIR REMOVAL FOR SAJ HEAVY EQUIPMENTS TEAM

SCOPE OF WORK FOR WACCAMAW RIVER FLOOD RISK MANAGEMENT STUDY SOCASTEE WEIR REMOVAL

Horry County, South Carolina

MARCH 2026

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Scope of Work

Table of Contents

| | |
|--------------------------------------|----|
| 1. Objectives | 3 |
| 2. Location | 3 |
| 3. Background | 4 |
| 4. Work to be Performed | 10 |

List of Figures

| | |
|---|----|
| Figure 1: Upstream Weir Location..... | 3 |
| Figure 2: Downstream Weir Location | 4 |
| Figure 3: Downstream Weir Detail View..... | 5 |
| Figure 4: Downstream Weir Typical Section View..... | 6 |
| Figure 5: Downstream Weir Cross Section View..... | 7 |
| Figure 6: Upstream Weir Detail View | 8 |
| Figure 7: Upstream Weir Cross Section View | 9 |
| Figure 8: Upstream Weir Typical Section View | 10 |

1. Objectives

The objective of this Scope of Work (SOW) is to provide recommended typical procedures and specifications for demolition, excavation, and backfilling in order to remove existing weirs on Socastee Creek as an alternative of the Waccamaw River Floor Risk Management (FRM) Study. It is understood that all coordination and field work associated with this work will be performed by Army Corps Operations staff. Some adjustment to the procedures discussed herein and the attached specifications should be anticipated based on the actual field conditions.

2. Location

The project site is located on Socastee Creek in Myrtle Beach, South Carolina, Horry County. The location of the existing weirs is shown in Figure 1 and 2. Along the channel is an approximate 60ft wide maintenance berm for construction access. Access locations are also marked in the figures below.

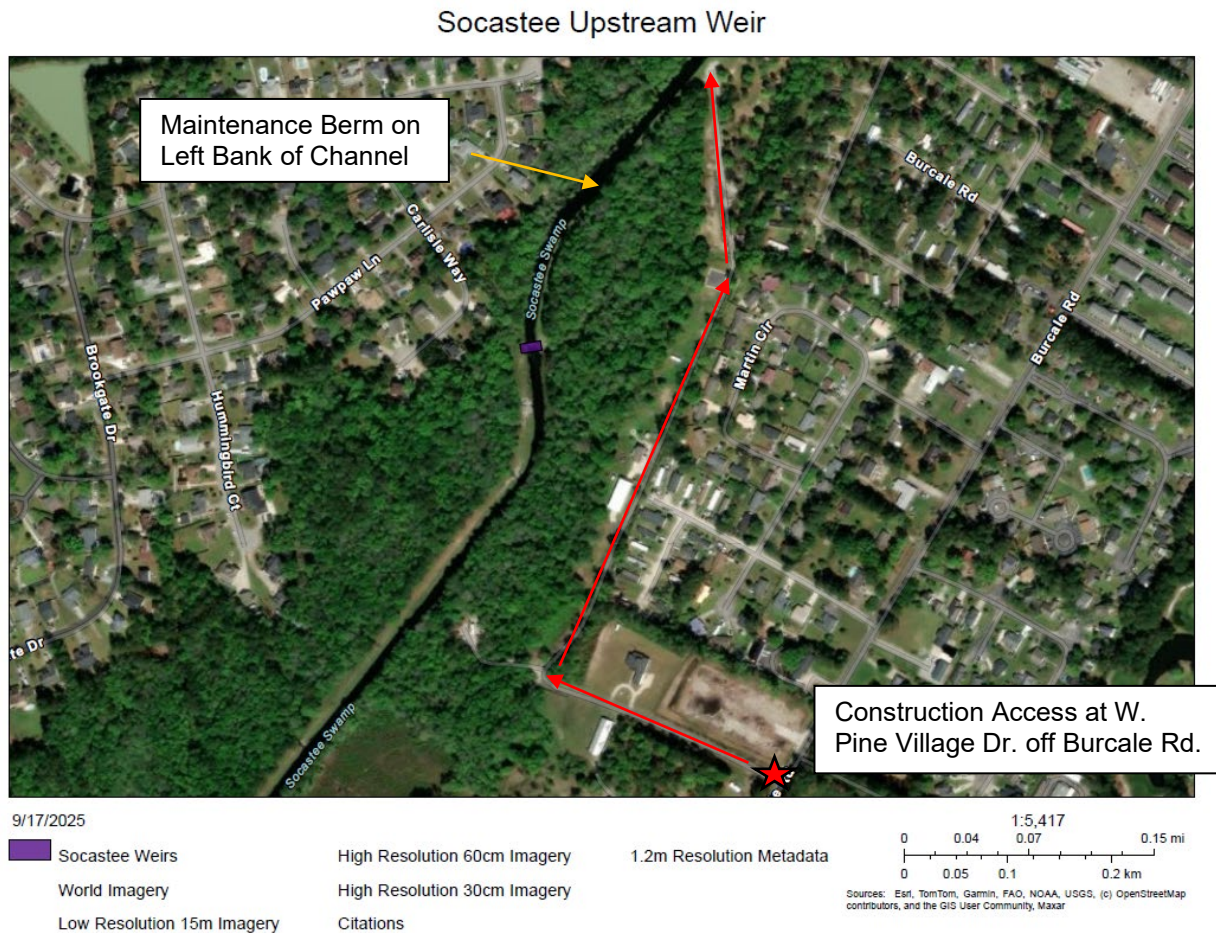


Figure 1: Upstream Weir Location

Socastee Downstream Weir



Figure 2: Downstream Weir Location

3. Background

The Socastee Creek Federal Project currently has two existing weirs along Socastee Creek – 50ft wide and 11ft high – constructed from concrete and sheet pile. They are protected by a layer of rip-rap 2 ft thick and 50 ft wide on both the upstream and downstream sides. The weirs were designed to maintain the groundwater table as it existed before construction of the weirs to preserve the natural habitat of the study area by mitigating wetland loss. However, increased development in this area means that the natural habitat may not be present as anticipated. Water currently flows around the weirs, eroding the area and causing damage to the weir structures. Removing the weirs would increase conveyance in the adjacent flood impact area and decrease flood elevations at upstream homes along Socastee Creek. Drawings of the weirs are shown in Figures 3 through 8.

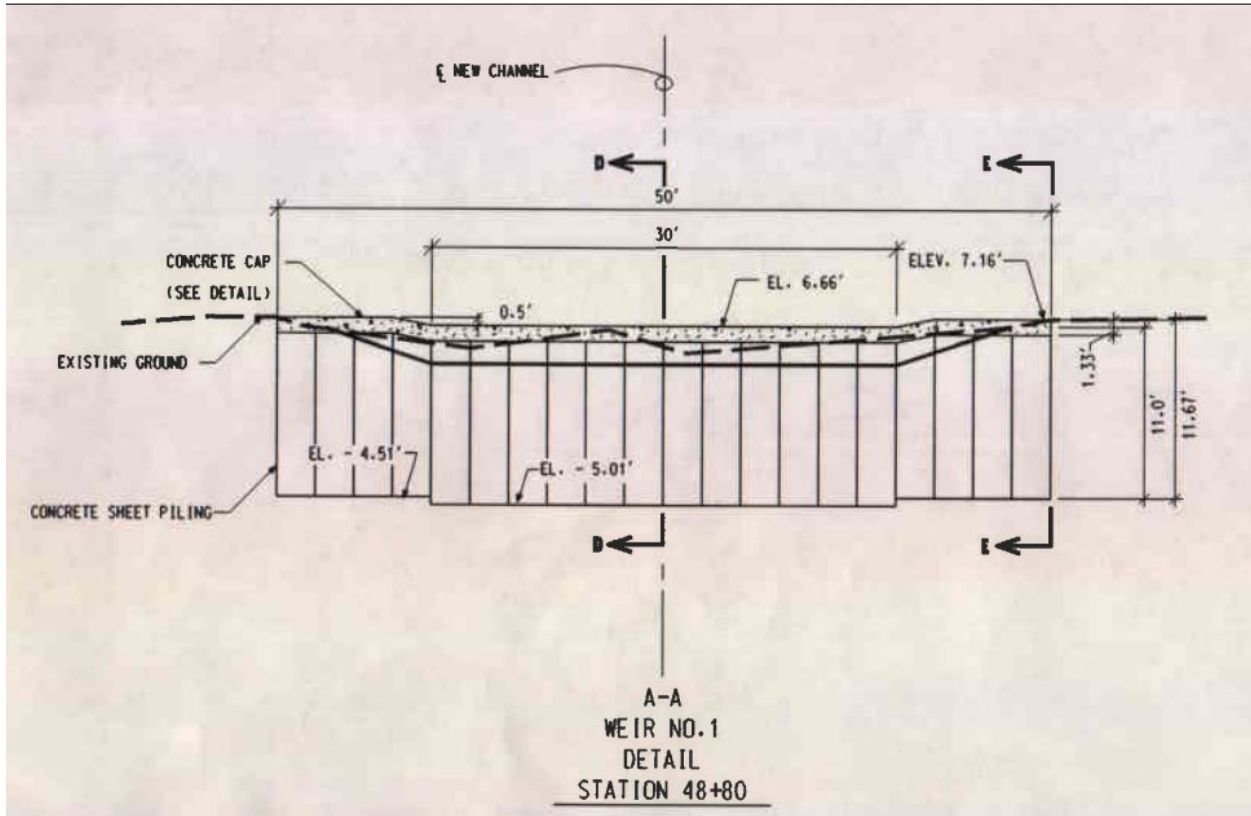


Figure 3: Downstream Weir Detail View

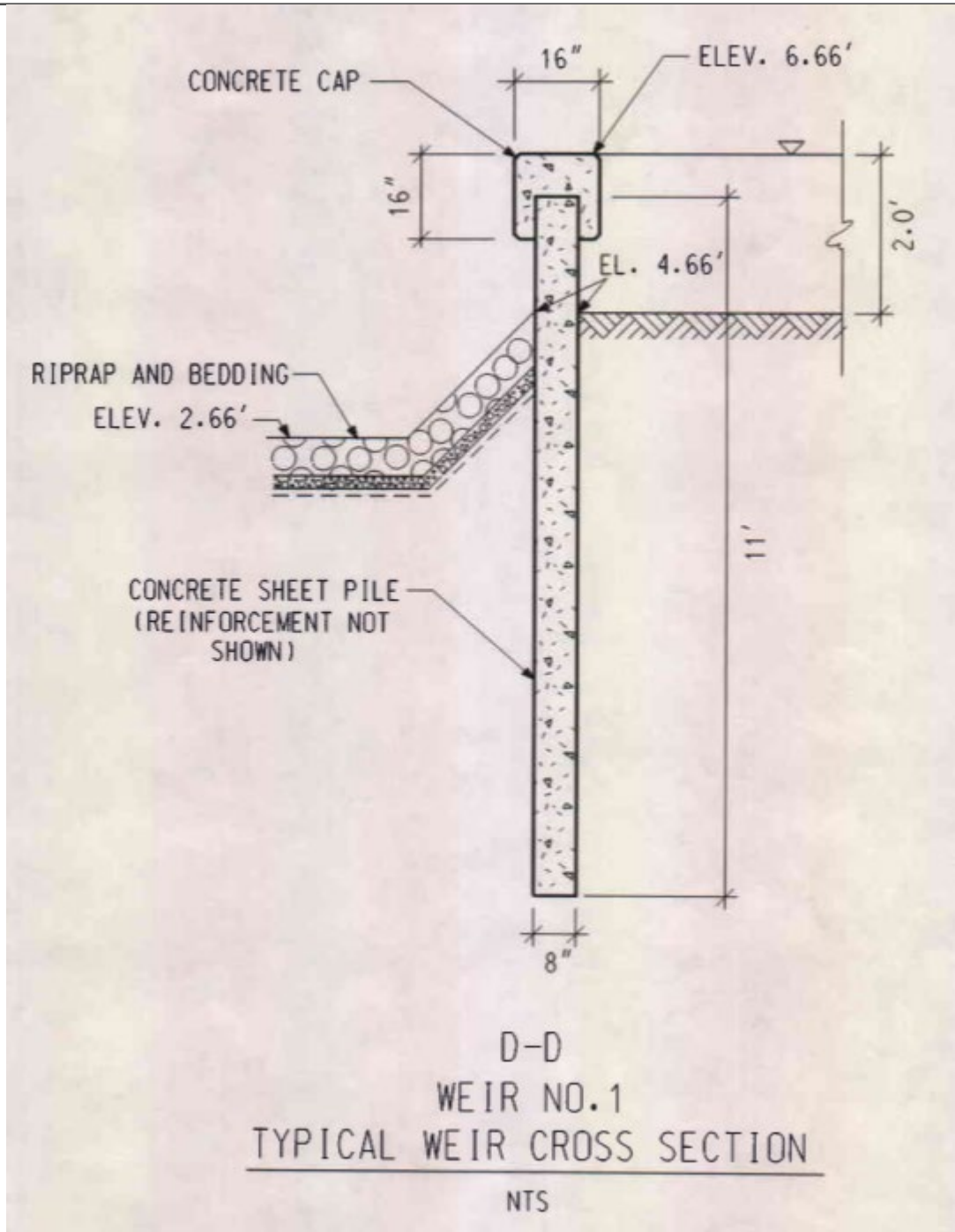


Figure 4: Downstream Weir Typical Section View

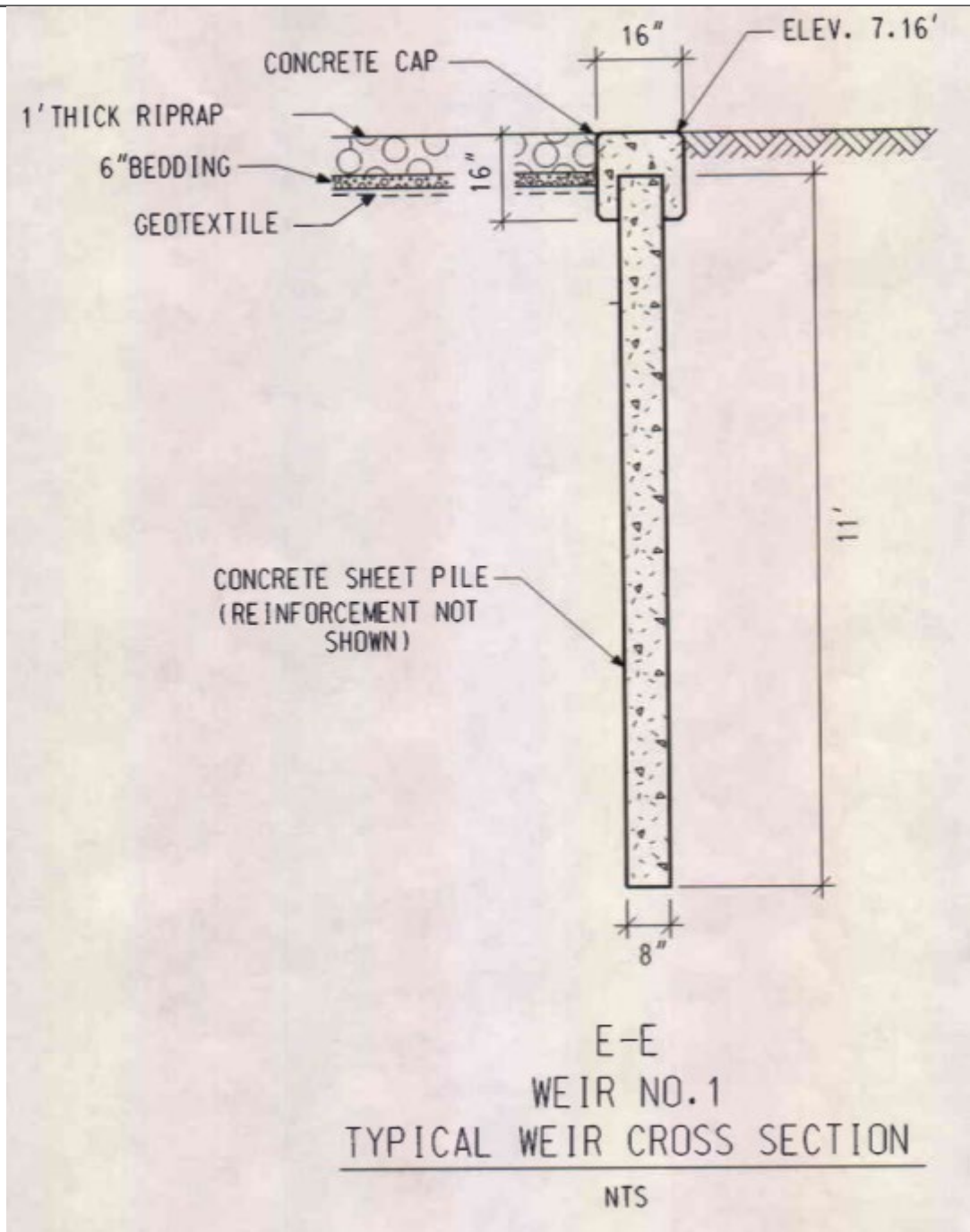


Figure 5: Downstream Weir Cross Section View

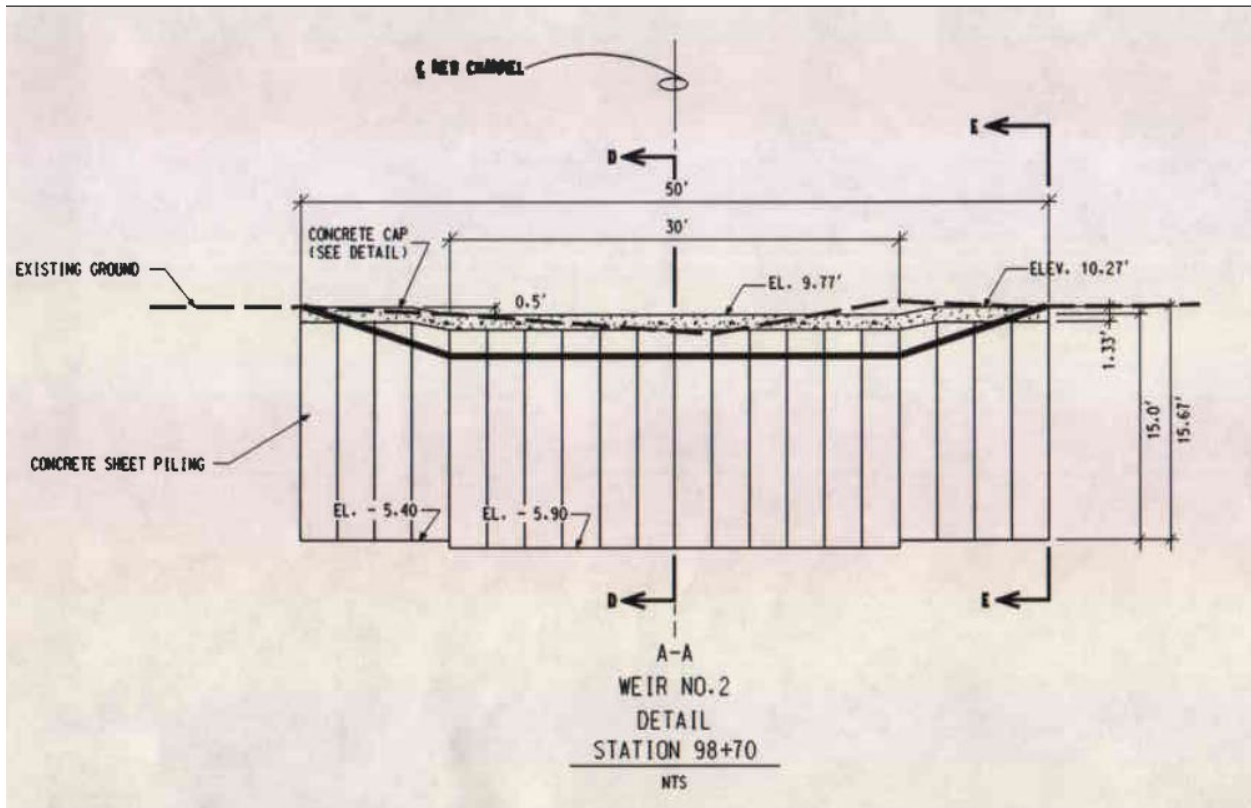


Figure 6: Upstream Weir Detail View

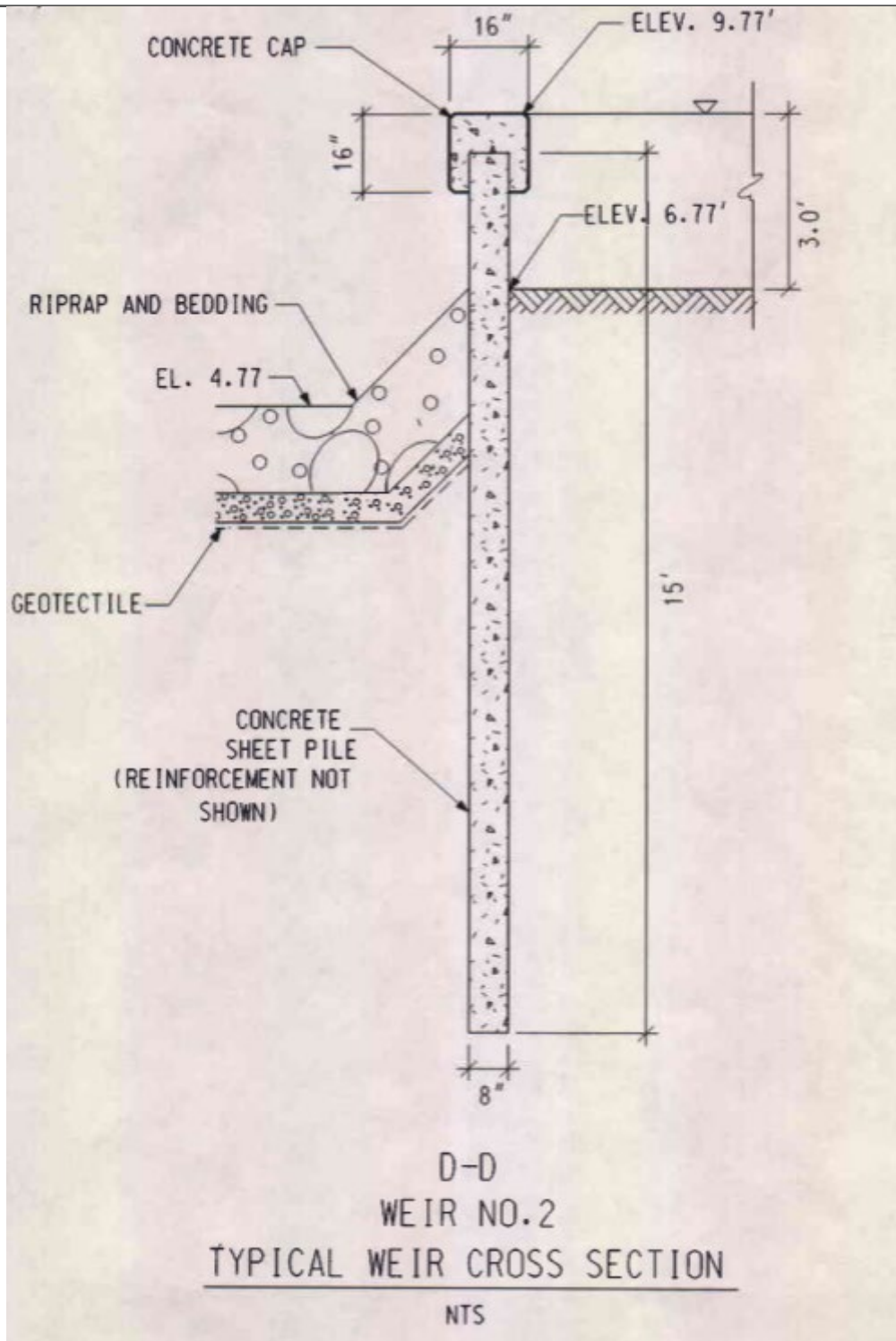


Figure 7: Upstream Weir Cross Section View

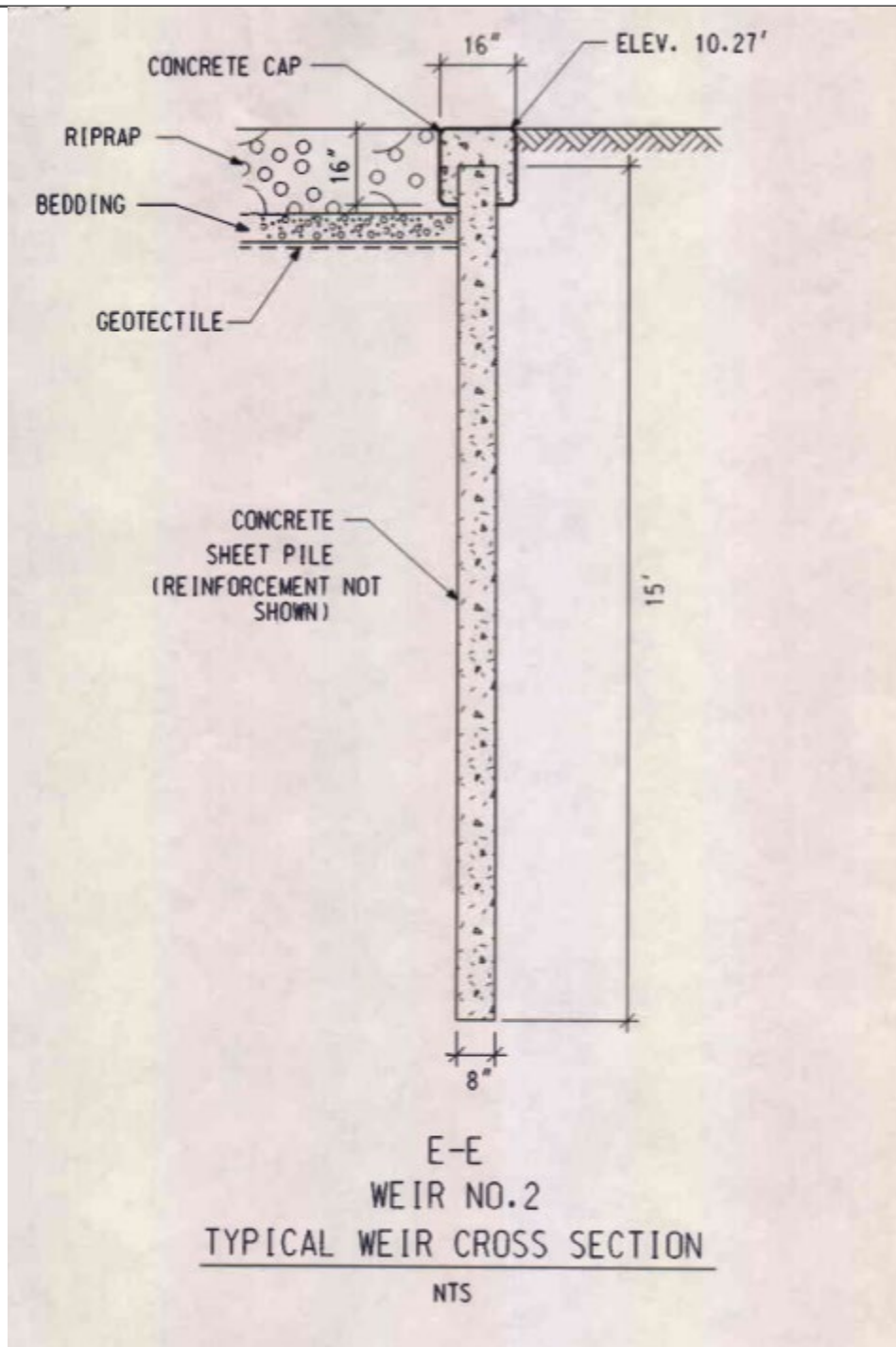


Figure 8: Upstream Weir Typical Section View

4. Work to be Performed

Excavation and Demolition:

- Install required silt and turbidity protection devices within the channel. Turbidity testing post construction will be required to ensure the water quality in the existing ICW project.

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- Excavations shall be performed by equipment suitable for the size and type of excavation and that will not damage existing side slopes.
 - Excavations shall be kept free of water at all times.
 - Remove the existing weir structures, cutting existing concrete piles 1ft below grade.
 - All concrete and riprap debris shall be demolished and salvaged to be used in the streambank protection.

Backfill:

- Backfill shall be clean, well-graded material, meeting one of the following Unified Soil Classification System (ASTM D2487) designations: SP, SM, SP-SM, and SP-SC, that is thoroughly mixed and free from debris, clods, seeds of nuisance or exotic species, and stones with a diameter in any direction greater than 3 inches. Fill shall have an organic content of less than 3 percent by weight.
- Backfill may be material excavated for the Work (native) or may be imported. The native materials may be blended with other on-site material or import material to achieve a material that meets the requirements for embankment fill.
- Backfill shall be placed in 8-inch layers and compact to at least 95 percent laboratory maximum dry density (ASTM D698). A cofferdam will need to be built to keep water out to achieve appropriate compaction.
- The lift thickness shall include loose material remaining from the previously compacted or scarified lift.
- Grade to bed profile at a 3H:1V slope form upstream to downstream of the removed weir structure. Match side slope grade to the adjacent areas.
- After grading, seed the side slopes with hydroseeding to match adjacent side slopes.

5. Safety

- a. All work shall be performed in accordance with safety standards of OSHA and EM385-1-1.
- b. Weekly safety meetings shall be held to discuss lessons learned or other safety concerns.
- c. All new personnel to the site shall be made aware of the nearest emergency medical treatment facilities as well as site specific safety plans.

5. Point of Contact

The primary Point of Contact (POC) for this assignment is Lindsay LaRocque, PhD, PE, Engineering Technical Lead, (843) 957-3587, Lindsey.Larocque@usace.army.mil