Chapter 1.
Introduction

Project Description and Development

This report describes the results of a Phase I archaeological survey of a 6.45-acre (2.6 ha) tract of land situated on the northwest shore of Long Point on Kelleys Island, Erie County, Ohio (Figure 1-1) and is intended to facilitate a review and evaluation by the Ohio Historic Preservation Office under Section 106 of the National Historic Preservation Act; this report is also intended to assist other state and federal agencies in their review. The address of the property is 1251 Long Point Lane (private) and it is described as part of Long Point, P.V. 11 PG. 6, Kelleys Island original lot 13, Erie County, Ohio (Plate 1). The property is owned by Predevelopment, Ltd. of 2335 Second Street, Cuyahoga Falls, Ohio 44221.

Predevelopment, Ltd. proposes a project which has two construction components: (1) a seasonal lodge and appurtenances to be located on a plot of land at the far northeastern portion of the property (known as the Building Envelope) and (2) a private boat docking facility to be located midway along the Lake Erie shoreline of the property. The locations of these components are shown on the accompanying survey maps (Plates 1-3). The seasonal lodge will be located within the Building Envelope, a polygon-shaped, 0.4-acre (0.16-ha) site, located 125 ft (38 m) inland of the Ordinary High Water Mark for Lake Erie. The docking facility will extend approximately 150 ft (46 m) into Lake Erie and will have a width of 200 ft (61 m).

The entire island constitutes the Kelleys Island National Register Historic District (Pape 1988). Additionally, the Village of Kelleys Island has enacted zoning codes that establish a Historic District Overlay Zone (Section 152.042), an Environmental Protection Overlay District (Section 152.043), and a Shore District (Section 152.131). The Predevelopment, Ltd. property is not within the Historic District Overlay Zone, but it does lie within the Environmental Protection Overlay District and the Shore District. On June 10, 2004, the Village of Kelleys Island adopted Resolution No. 2004-R-9 stating that the construction of the proposed docking facility does not conflict with the Village's Shoreline Zoning Ordinance and thereby is authorized.

Project Areas

Building Envelope

The Building Envelope (BE) is located at the extreme northern end of the Predevelopment, Ltd. property and inland 125 ft (38 m) from the Ordinary High Water Mark (OHWM) shoreline of Lake Erie. Code restrictions on Kelleys Island prohibit the construction of residential buildings within this distance of the OHWM or within 15 ft (4.6 m) of a property boundary. The BE lies at elevations ranging from 577 ft above mean sea level (MSL) at its southern end to 579.5 ft at its northeastern corner (Figure 1-2). The 100-yr open-coast flood for Kelleys Island is 577.5 ft MSL (U.S. Army Corps of Engineers 1977:plate 4), which passes through the southerly one third of the envelope. The 10-yr, 50-yr, and 500-yr flood elevations for Kelleys Island are 576.3, 577.2, and 578.2, respectively (Table 2.9). The BE is an irregular polygon approximately 283 ft (86 m) in length and 70 ft (21 m) in width, with a surface area of 17,300 ft^2 (1,607 m^2) or 0.4 acres (0.16 ha). Construction proposed for the BE is a 1 $^1/_2$- or 2-story seasonal lodge with a footprint of up to 3,500 ft^2 (325 m^2) and a wrap-around porch. Appurtenances located within or near the BE include: (1) a 2,000 to 3,000 gallon septic tank with pump and a 1,000 to 1,500 ft^2 raised leach field; a similar area is reserved for a future replacement of the leach field, (2) a well or cistern for potable water, (3) a deck or shelter at or near the water's edge of up to 1,200 ft^2, (4) an accessory building of up to 600 ft^2, (5) a gravel parking area of 800 ft^2, and (6) a corridor for communication and electric service (Plates 2 and 3).

The only land disturbance associated with the project, with the exception of the shore connections for the boat docking facility (see below), consists of building a seasonal lodge at the extreme northern end of the Predevelopment, Ltd. property in the Building Envelope (BE). The code restrictions mentioned above in relation to OHWM and the property boundary, dictate the position and shape of the BE (Figure 1-2). The OHWM shoreline has been set by the U.S. Army Corps of Engineers at an elevation of 573.4 ft (174.77 m) above the International Great Lakes Datum (IGLD, 1985) or 4.2 ft (1.28 m) above Low Water Datum

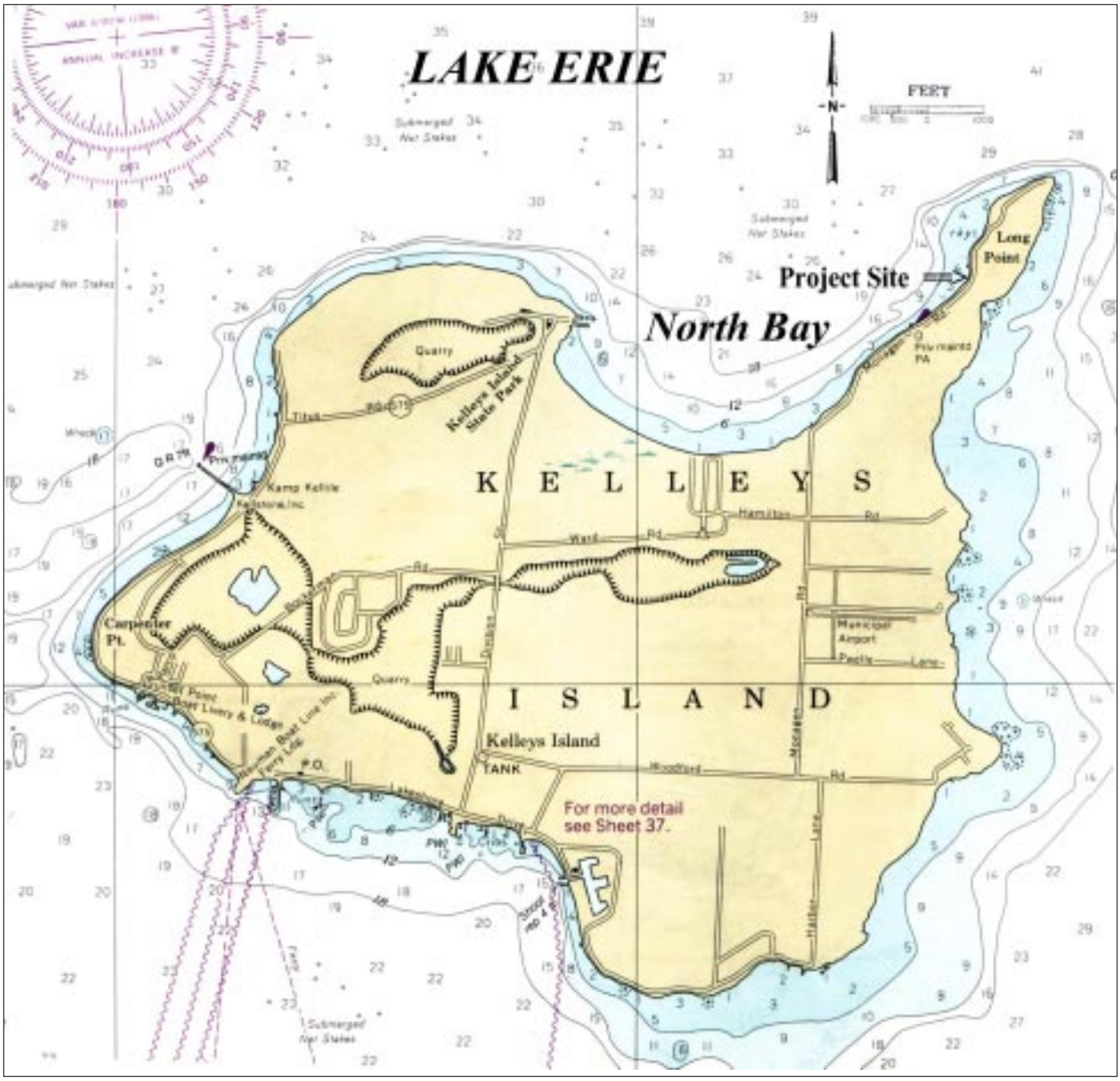

Figure 1-1. Navigational chart of Lake Erie surrounding Kelleys Island, showing project location (NOAA Chart No. 14842, May 1986).

(LWD) for Lake Erie (569.2 ft or 173.49 m, IGLD, 1985). The lodge will be centrally located within the BE, have a footprint of up to 3,500 ft^2 (325 m^2), and include appurtenances, such as an access drive from Long Point Lane, a water well, and a sewage treatment facility. The BE comprises about 6% of the total Predevelopment, Ltd. tract. It is likely that most of the BE will be temporarily disturbed during construction of the seasonal lodge. Upon completion of the construction all disturbed areas surrounding the structures will be restored and landscaped.

BOAT DOCKING FACILITY

The proposed project consists of a boat docking facility on the northwest shore of Long Point, Kelleys Island. Long Point peninsula projects approximately 6,200 ft (1,890 m) into Lake Erie from the western side of the island. The docking facility is planned for a location on the shore owned by Predevelopment, Ltd., about 2,500 ft (760 m) southwest of the tip of the point. The Predevelopment Ltd. tract extends for 1,620 ft (494 m) along the shore, which mainly consists of a rocky

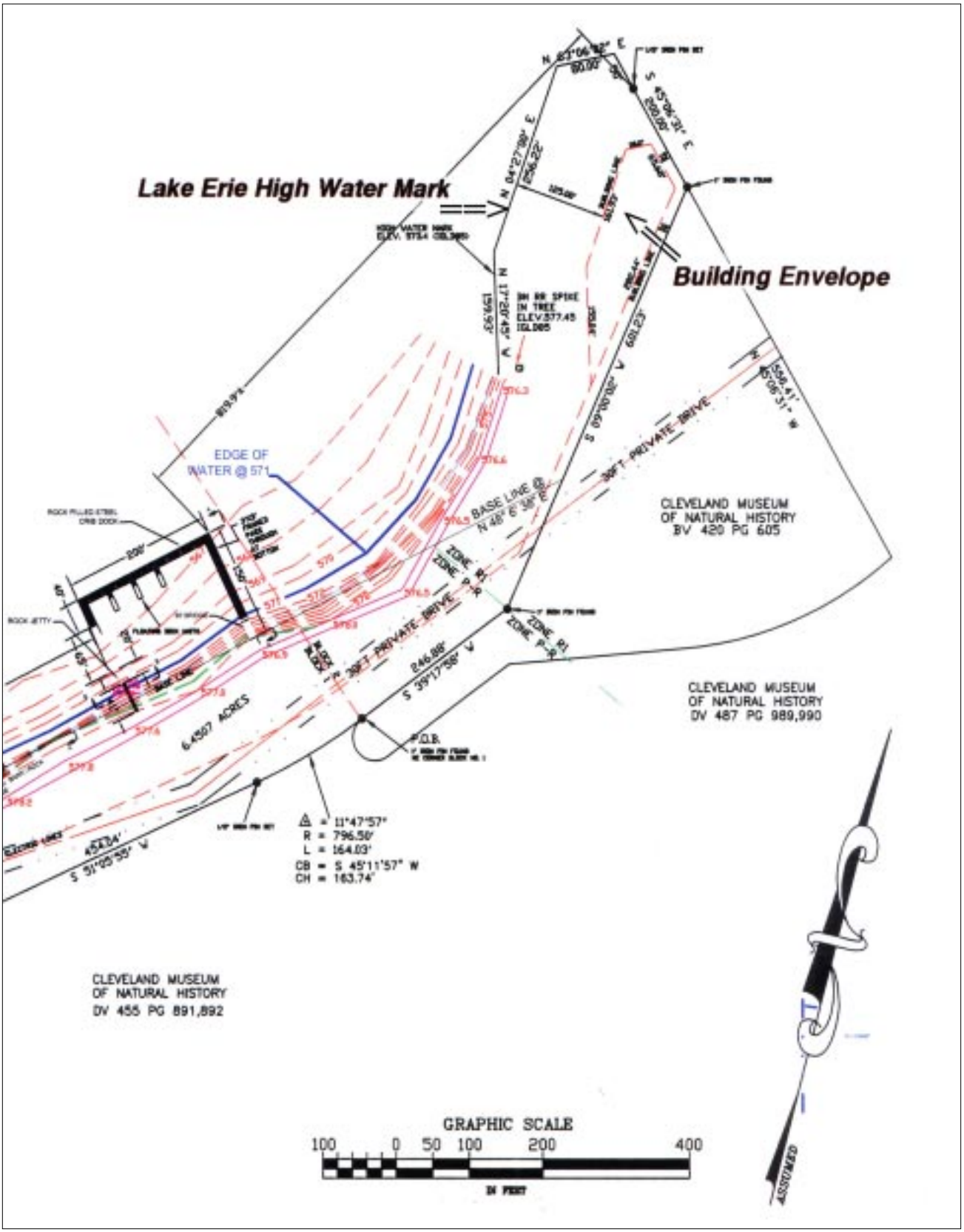

Figure 1-2. Northern portion of Predevelopment, Ltd. tract, showing location of Building Envelope and Lake Erie High Water Mark.

coast. The southern two thirds of the shore forms a gentle embayment and the northern third is a rocky headland. The docking facility is proposed for midway along the embayment about 500 ft (150 m) from the southern property line (Plate 1).

The docking facility will encompass an area of 30,000 ft^2 (2,790 m^2) and accommodate 8-10 recreational boats. The basic construction will be a series of 17 rock-filled steel cribs, each 10 ft (3 m) wide and 20 ft (6 m) long, forming a rectangular boat basin (Figure 1-3). The northerly side of the facility extends lakeward 150 ft (46 m) perpendicular to the shore, then turns southerly for 200 ft (61 m) to form the face of the dock, and then easterly for 40 ft (12 m) to partially close off the southern end. The entrance to the facility is at the southern end with an opening of 65 ft (20 m). At the shore, directly opposite the entrance channel, a rock jetty (Figures 1-3 and 1-4) will be constructed which projects into the lake about 55 ft (17 m). The purposes of the jetty are to: (1) form a constriction at the entrance channel to limit wave transmission into the basin (wave diffraction), (2) prevent alongshore transported sand from entering the basin (littoral drift), and (3) absorb wave action within the basin to reduce surges and oscillations. To control water stagnation within the boat basin, the northeastern wall will include a 30-ft (9-m) bridge at the shore and a 3x3-ft (1x1-m) framed pass through at the bottom of the 4th crib from the shore. Within the boat basin, 3-4 floating docks will be attached to the inside of the westerly crib wall (Figure 1-3).

Shore access will utilize a portion of the old shoreline road. A 600 ft^2 loading area and a walk way will be constructed on the shore at the northern end of the docking facility (Plate 2). The old shoreline road will be permanently closed to all but pedestrian traffic south of the loading area. Existing access to the old shoreline road near the Lincoln House foundation will also be abandoned. A new access point to the old shoreline road from Long Point Lane will be constructed approximately 380 ft (116 m) north of the foundation (Plate 2). Existing portions of the old shoreline road, north and south of the new access point, will be used for private approach to the lodge and dock.

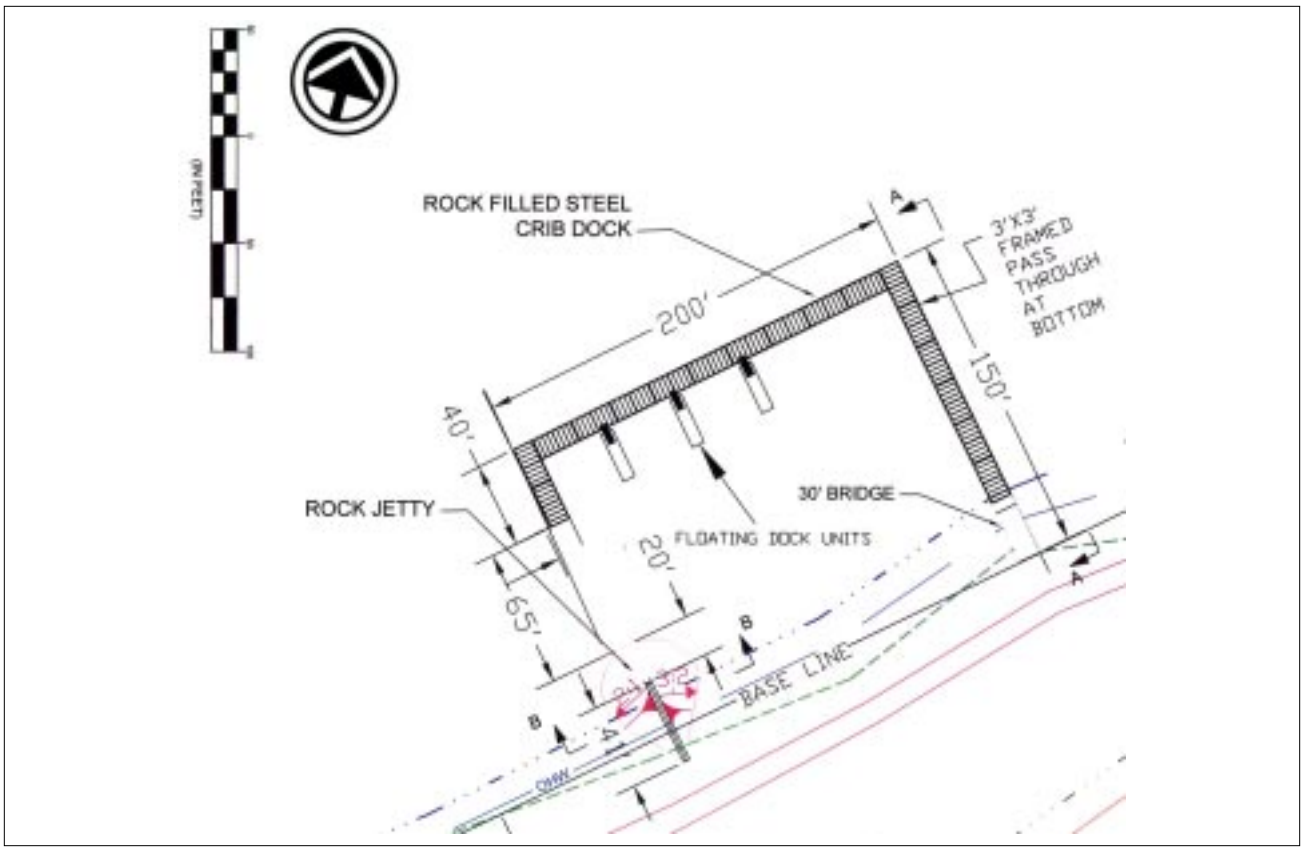

Figure 1-3. Plan view of proposed boat docking facility on Predevelopment, Ltd. tract.

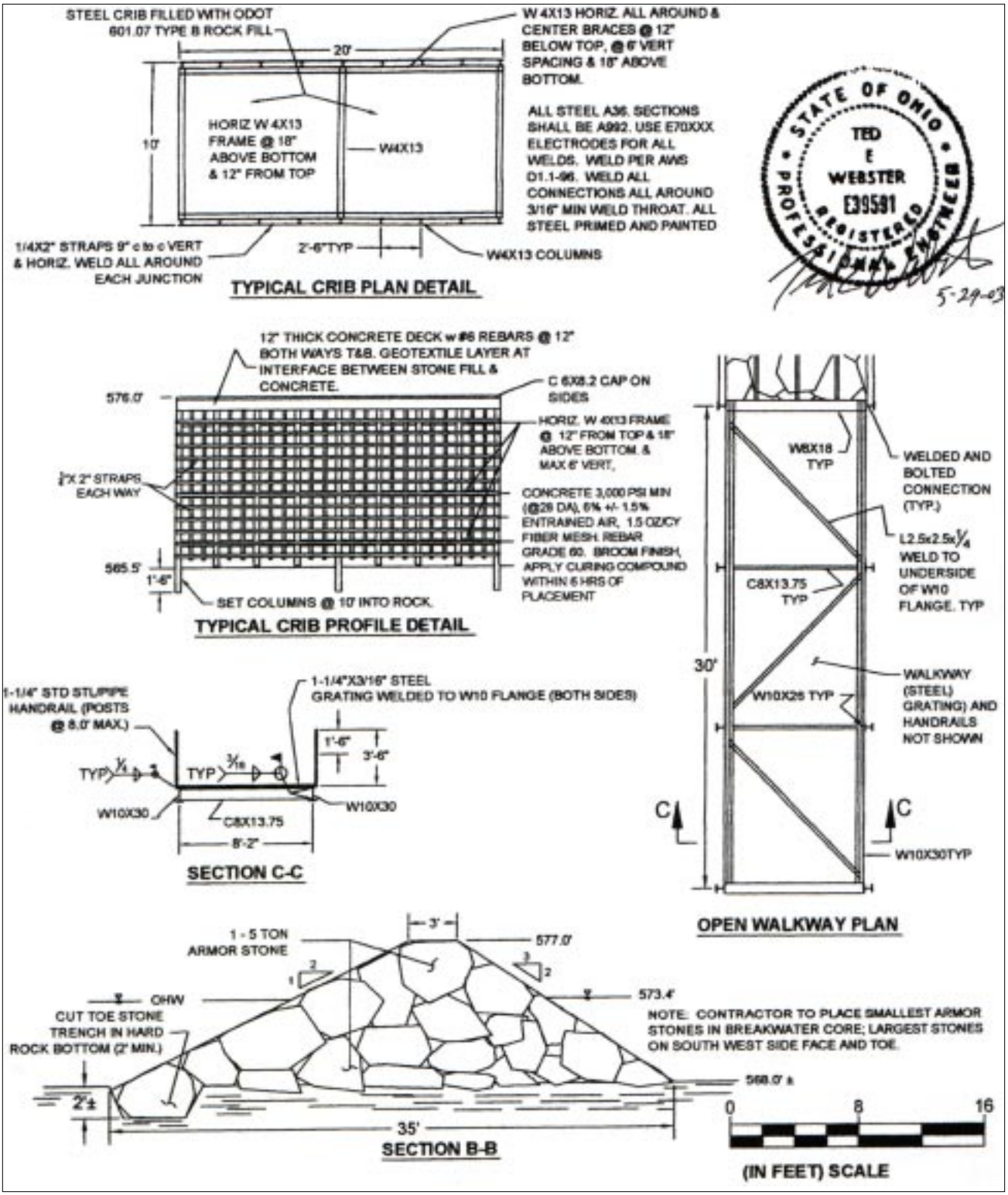

Figure 1-4. Design details of rock-filled steel cribs and rock jetty for boat docking facility.

Organization of Report

This report is organized into 7 numbered chapters and a photographic appendix. The contents of each chapter are briefly outlined as follows.

Chapter 1 is the introduction to the report and includes a discussion of the project's objectives and development, as well as a brief description of the project site investigated. This chapter also acknowledges the assistance of individuals and organizations in conducting these investigations.

Chapter 2 presents an extended summary of the environmental setting of the project location and the relevant portion of Lake Erie where project activity is proposed. Because of the sensitive environmental nature of the project location, special attention is given to the geology, soils, climate, and biota of the area investigated.

Chapter 3 provides prehistoric and historic cultural context of the region, as well as relevant agricultural and industrial history of Kelleys Island and the maritime history of western Lake Erie.

Chapter 4 presents the research design and assumptions made in planning the investigations. This chapter details the literature search and field and laboratory methods used to investigate both the land-based and submerged cultural resources within the project area.

Chapter 5 is a description of the field and laboratory results of the Phase I surveys for both the land-based and submerged components of the investigations. This chapter also presents a detailed description of the known shipwrecks within the project area.

Chapter 6 is an assessment of potential effects of the proposed project on known or newly documented cultural resources of the area.

Chapter 7 presents the conclusions of the investigations and offers recommendations to minimize the effects of the proposed project on cultural and environmental resources. References cited in this report are listed following this chapter.

Appendixes A through D provide photographic documentation of the project location and archaeological features found at the study areas.

Acknowledgments

The author wishes to acknowledge the contributions of several individuals in the performance of field and laboratory work and in the preparation of this report. Louis F. Sharpe provided an orientation to the project property, and along with Ricki C. Herdendorf, assisted with the excavations and soil screening at the Building Envelope site. Ms. Herdendorf also served as data recorder during the underwater survey phase of the project and designed the layout for this report. Dr. Brian Redmond, senior archaeologist with the Cleveland Museum of Natural History, examined all of the chert artifacts obtained from the site excavations and confirmed debitage classifications. Identifications of plant species from the project property were made in consultation with Dr. Ronald Stuckey, professor emeritus of botany at The Ohio State University; Dr. James Bissell, senior botanist with the Cleveland Museum of Natural History; and Debra Woischke and Greg Schneider of the Natural Heritage Program, Division of Natural Areas and Preserves, Ohio Department of Natural Resources. Dale L. Liebenthal, Jonathan A. Fuller, and Constance J. Livchak of the Lake Erie Geology Section, Ohio Division of Geological Survey participated with the author in a side-scan sonar survey for submerged cultural resources in the waters surrounding Kelleys Island. Dr. Richard B. King, associate professor of biological sciences, and Kristin M. Stanford, research associate, from Northern Illinois University visited the site with the author and provided an estimate of the Lake Erie watersnake population. C. Patrick Labadie, historian with NOAA's Thunder Bay National Marine Sanctuary, participated with the author in the documentation of shipwrecks offshore of Long Point and provided insight as to the possibility of additional submerged cultural resources in the vicinity of these sites. Claudia Brown, clerk for the Village of Kelleys Island Planning Commission, supplied information on the historic dwellings of Long Point. The author is indebted to all of these individuals for their gracious assistance with this project.