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**CHELSEA CREEK – FIRST NAVAL ENGAGEMENT OF THE AMERICAN REVOLUTION
CHELSEA, EAST BOSTON, REVERE, AND WINTHROP
SUFFOLK COUNTY, MASSACHUSETTS**

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**FINAL TECHNICAL REPORT
(ARPA 1979, Section 470hh - deletions)
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Reconstructing the landscape of 1775 was not a simple task. We relied on the resources obtained through the Boston Public Library’s Norman B. Leventhal Map Center, MassGIS, and the earlier work done by Boston Survey Consultants for CZM. CZM’s Dan Sampson and Emily Chambliss have provided on-going support through the project. The work and advice of Charlie Frye, ESRI’s Senior Cartographer, on the Battle of Bunker Hill inspired our approach to recreating the Chelsea Creek landscape. University of Miami’s Dr. David Tenenbaum and GIS consultant, Chris Watson, provided significant guidance and technical assistance. The precision and reliability of the data set and the resulting map products could not have been achieved without the intimate knowledge and generous assistance of Steve Mague of Durand Anastas Associates.

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ABSTRACT

Overshadowed by the iconic battles at Concord/Lexington and Bunker Hill, the Battle of Chelsea Creek is often overlooked as part of the siege of Boston. On May 27-28, 1775, Provincial (American) militia forces raided British forage and supplies on the northern shore of Boston Harbor. A running engagement with British marines and armed vessels ensued. The British forces were unsuccessful and resulted in the capture and destruction of the schooner HMS *Diana* as well as depriving the British forces of forage and livestock. Today, the area is a heavily modified urban-industrial landscape. The associated development activities obscured, damaged, or destroyed the major 1775 landscape features limiting the ability to identify the battlefield.

The Board of Underwater Archaeological Resources (BUAR), Massachusetts Executive Office of Energy and Environmental Affairs, with participation by University of Massachusetts at Boston's Departments of Anthropology/Historical Archaeology Program and Earth, Environment and Ocean Sciences, undertook the long-overdue critical re-examination of the battle. This multi-disciplinary research involved evaluation of documentary record, reconstruction of the historic landscape, a military terrain analysis (KOCOA), and a preliminary field investigation. This study was funded through a grant awarded by the National Park Service's American Battlefield Protection Program.

The primary historical sources contained a number of time cues and locational information that initially permitted only a general reconstruction of the battle. The majority of battle participants were not from the local area and the majority of the landmarks they describe are not actually named. This lack of local knowledge and precision in the documentary record made it difficult to identify the defining features on the actual battlefield. A high resolution GIS dataset and Citation Data Model (CDM) of the temporal and spatial features associated with the Battle of Chelsea Creek and the 1775 Boston landscape have been developed and base-level and battlefield maps were produced within the GIS. By subjecting the battle narrative to a KOCOA analysis we were able to reasonably identify the location of key features on our geo-referenced reconstructed 1775 landscape. This application has provided a clearer understanding of how the physical landscape influenced the Battle of Chelsea Creek and has provided valuable insights into battlefield events and preservation.

Six core areas within the battlefield study area were visually inspected and three areas were identified as having potential for site preservation and more intensive investigation: Crooked Creek engagement area; Mill Hill/Chelsea Neck engagement area; and Winnisimmet Ferry Landing with HMS *Diana* grounding site. Filtering the battle narrative through the KOCOA lense and by tying it to the location of these historic features, we were able to define the physical limits of battle events and related movements. However, preliminary field investigation of those features provided insufficient physical evidence in order to prepare National Register nominations at this time. Field investigation verified that the majority of the "battlefield" has been heavily impacted by urban development. Therefore, no NRHP evaluation of Revolutionary War defining features or sites was possible. In order to identify preserved locations containing the defining features of the battle, a more detailed topographic and land use analyses coupled with additional ground-truthing, intensive archeological sampling and geophysical surveys within core areas is recommended.

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I. INTRODUCTION

Overshadowed by the battles at Concord/Lexington and Bunker Hill, the Battle of Chelsea Creek (also referred to as the Battle of Hog or Noddles Islands) is often overlooked as part of the siege of Boston. On May 27, 1775, Provincial (American) militia forces were dispatched to the northern edge of Boston Harbor (present day Chelsea, East Boston, Revere, and Winthrop) to capture, drive off, and/or destroy supplies, livestock and other forage stockpiled by British forces on the nearby Boston Harbor islands. British marines and armed vessels from Admiral Samuel Grave's fleet, later joined by troops under General Thomas Gage attempted to stop them. The British forces were unsuccessful. A major result of the battle was the capture and destruction of the schooner HMS *Diana* as well as British casualties (estimates vary widely). Thus, it was the first naval engagement of the Revolutionary War and an American victory. It might be considered the first offensive operation as opposed to defensive as at Concord/Lexington and Bunker Hill. It was the first joint operation of forces from various colonies (MA, CT, and NH) in what would become the War of Independence. Further, it included the first offensive use of cannon by Provincial (American) forces. The loss of HMS *Diana* directly influenced and limited the use of Admiral Grave's fleet during the subsequent Battle of Bunker Hill. The loss of livestock and hay deprived the British garrison in Boston of much needed supplies of food and fodder.

This study of the Battle of Chelsea Creek is supported by a grant from the National Park Service (NPS) American Battlefield Protection Program (ABPP) through a fiscal year 2009 appropriation from the American Battlefield Protection Program Fund authorized by the Omnibus Parks and Public Lands Management Act of 1996 (P.L. 104-333) and by the Fiscal Year 2009 Omnibus Appropriations Act (P.L. 111-8). Additional support was provided by Massachusetts Executive Office of Energy and Environment (Board of Underwater Archaeological Resources and Office of Coastal Zone Management) and the University of Massachusetts at Boston (Departments of Anthropology and Earth, Environmental and Ocean Sciences).

The main goals of this study are to undertake a comprehensive examination of the battle records, define the battlefield, and interpret the battle through a military terrain model referred to as KOCOA. These goals will be achieved through the integration of traditional historical and archeological research with state-of-the-art geographic information technologies.

1.1 Study Location

The Chelsea Creek Battlefield site consists of the location of a battle between Provincial militia units and British naval and army units on May 27-28, 1775. The site is located in the present-day municipalities of Boston (section known as East Boston), Chelsea, Revere, and Winthrop, Suffolk County, Massachusetts. It includes sections of USGS Quad Sheets Boston North (1991), Boston South (1987), and Lynn (1999), Massachusetts. The central and unifying geographic feature is Chelsea Creek (also referred to as Chelsea River), which flows into the Mystic River as it meets Boston's Inner Harbor (Figure 1.1).

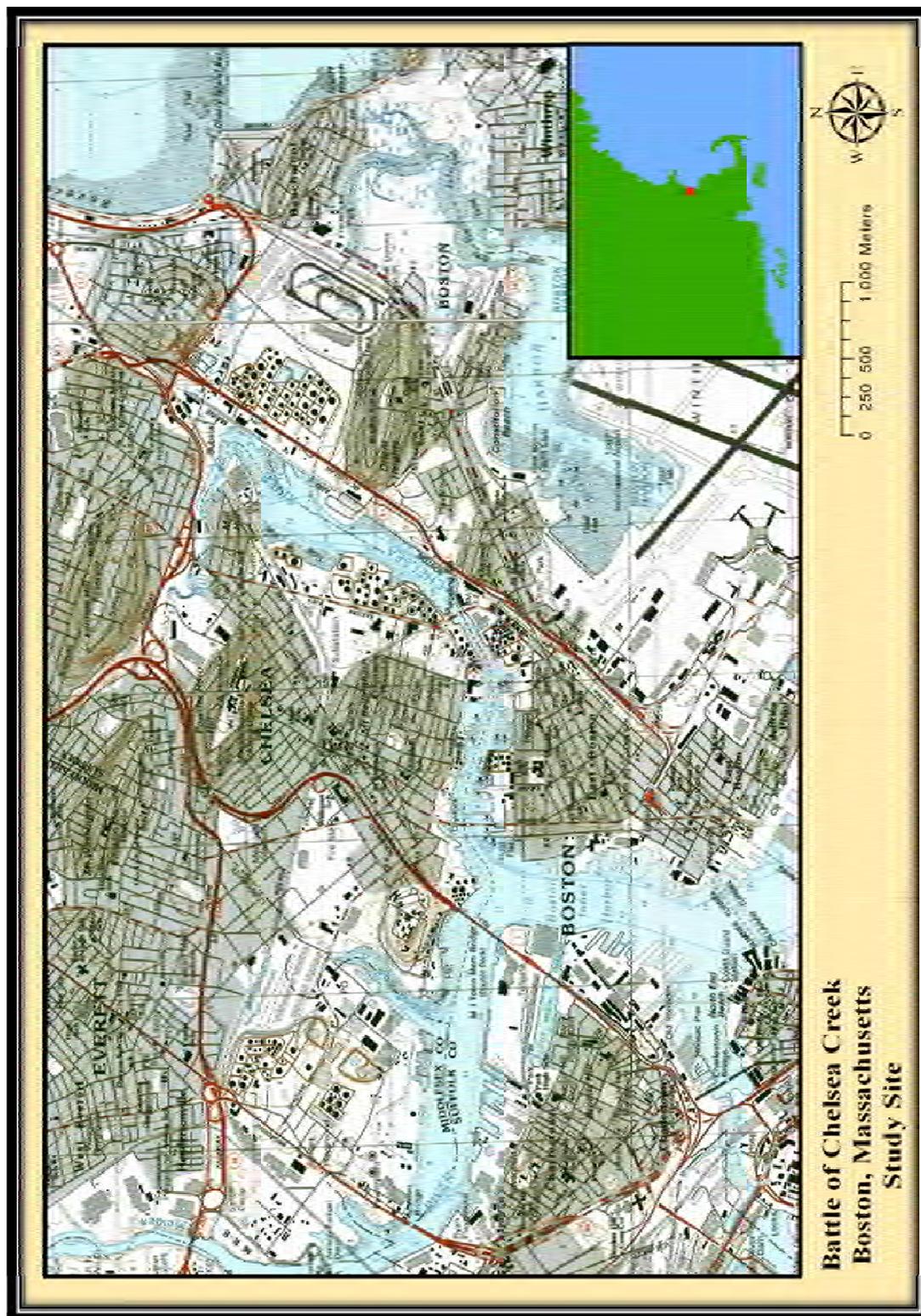


Figure 1.1. Study Area depicted from USGS topographic quad sheets.

The predominant use of the land area is industrial and commercial, with abutting high density residential housing (single and multi-family) and limited open space (including reclaimed brown fields). Chelsea Creek is the main waterway serving chiefly petroleum and road salt depots along its shore. The cities of Chelsea, Revere, and Boston, and the Massachusetts Port Authority continually expand the commercial/industrial use of the area. Part of the study area is on original land, but segments have been filled from the 18th century through the present. Previous filling of tidelands and the activities of dredging and construction related to industrial/commercial development of the adjacent shoreline characterize the threats. These threats have and will continue to adversely affect cultural resources located in the battlefield, through their physical impacts and resulting alterations to the local environment.

1.2 Research Design and Methodology

The goal of this study is to precisely locate British and Provincial (American) military operations and their associated archeological resources, including the remains of HMS *Diana*, through non-destructive methods (archival research and field documentation; we anticipate future work would involve remote sensing). The GIS/GPS mapping of the various components of the engagement, along with the application of the KOCOA scheme, assist in the identification, delineation, and interpretation of the battlefield. This information will aid in the assessment of present and future threats as well as guide management strategies, including preservation and public interpretation.

The two major objectives of research in this phase of the project are to (1) to map, inventory, and evaluate all of the known battlefield features; and (2) examine the defining features (sites) using the ABPP KOCOA standards (Lowe 2000). By documenting the battlefield features and its related archeological components, we can define the extent and potential boundaries of the battlefield and identify potential threats. The KOCOA system (developed by military experts to analyze and categorize defining features) focuses primarily on terrain, but also considers historic structures that were significant during the battles. Critical defining features are those that were significant in determining the ultimate outcome of the battle. Additionally, application of KOCOA will facilitate interpretation of the battlefield for the public.

To accomplish these goals, we will employ several research strategies that will address threats by accurately defining the extent of the battlefield and recording the location of remnant landscapes and archeological components of the Battle of Chelsea Creek. This will include:

- assessments of historic information of the battlefield that will identify specific, significant locations, and possible archeological sites;
- assessments of historic maps and GIS surveys of these properties that will permit reconstruction of the landscape;
- assessments of the potential for preservation of battlefield components; and
- public discussions of the battle and potential threats may assist in alleviating or reducing these threats.

In addition, accurate location data and environmental conditions for the archeological components of the battlefield accomplish the State's goal of compiling a comprehensive inventory of historic and archaeological resources.

In broad terms, the purpose for undertaking background research is to determine general locations within a study area where there is the likelihood for encountering cultural materials and to provide the contextual framework for evaluation and interpreting these resources. Archeological and historical background research consists of collecting data concerning known historic and Native American sites, and about the study area's environment. Historical records are thoroughly examined in order to gain an understanding of the events of the battle.

A review of primary and secondary sources, including historic maps, provide cultural context and help to identify possible sites and potential geographic features. Environmental information is collected to enable prediction of archaeological sites, evaluate the state of landscape preservation, and to facilitate later planning. Information concerning geography, topography, geology, soils, climate and vegetation was gathered from archival and current sources to gain and understanding of the 1775 cultural landscape and relate it to the contemporary landscape.

A general regional cultural context is provided below (1.4 Cultural Context), while detailed description of the sequence of the battle are in **Section 2: Historical Analysis of the Battle of Chelsea Creek** and **Appendix 1: Primary Accounts Related to the Battle of Chelsea Creek**. The proposed manner of compiling data to create a geo-referenced delineation of the battlefield and associated components will provide the most appropriate baseline information necessary to identify and protect features, guide future research, and assist decision makers. **Section 3: Application of a Geographical Information System to the Study of the Battle of Chelsea Creek** describes the process of reconstructing the 1775 landscape, provides a platform to integrate archival and topographic information, guide potential field investigations, and facilitate the KOCOAs analysis. Further, this information will allow managers of these parcels and resources to adequately address threats, promote preservation, and provide interpretation of sites and the battlefield for the benefit of the public.

The ABPP KOCOAs military terrain model integrates primary and secondary sources with spatial data on primary and ancillary sites and features. By identifying locations of landing places, cannon emplacements, skirmishes and other sites identified in historical accounts, it facilitates the identification and assessment of routes of approach, engagement, movements and withdrawal of Provincial (American) and British forces. All sites and routes will be integrated into a GIS map of the entire battlefield and a military terrain model. This analysis is detailed in **Section 4: Summary KOCOAs Analysis**.

The KOCOAs analysis identifies key battlefield features on the landscape. Windshield and walkover surveys of study area provide an on-the-ground level understanding of current conditions, an opportunity to photo-document key features and terrain, and can potentially involve community members in field aspect of project. Using GPS techniques, geo-reference key features of the battlefield are relocated on the current landscape. The purpose of the walkover is to verify the location of any reported sites found through documentary research, and potentially identify those that are not in the literature. This analysis is detailed in **Section 5. Field Investigation**

By incorporate data in the previous sections, we can define the important features, assess their archeological potential, and establish the boundaries of the battlefield. Preliminary results are presented in **Section 6. Summary and Recommendations**.

1.3 Environmental Setting

The study area is located within the northern portion of Boston Inner Harbor encompassing the present-day municipalities of Boston (section known as East Boston), Chelsea, Revere, and Winthrop, Massachusetts. The communities surrounding this portion of Boston Harbor are situated on the vast lowland basin created by the Charles River and Mystic River systems that widens to include most of the coastline around Massachusetts Bay. The central and unifying geographic feature of our study area is Chelsea Creek (also referred to as Chelsea River), which flows into the Mystic River as it meets Boston Harbor just above the outlet of the Charles River. Boston Harbor functions as an estuary where the freshwater of these drainage systems mix with sea water from Massachusetts Bay.

In geologic terms, our study area lies within the Boston Basin which is part of the Seaboard Lowlands physiographic zone of southern New England. The typography of this area is the combined result of glacial, fluvial, and coastal dynamics. The general area is characterized by a line of volcanic bedrock that forms the northern edge of the Boston Basin. This bedrock lies close to or at ground level and is visible as outcrops. Blue clay and slate underline much of the basin (MHC 1982).

Southern New England underwent repeated periodic glacial advances and retreats, mostly recently around 17,500 years ago. Glacial movements resulted in the creation of a variety of landforms such drumlins, eskers, kames, moraines, outwash plains, and terraces. Several glacial drumlins are prominent recognizable features of the battlefield, including present-day Admiral Hill, Fennos Hill, Mt. Bellingham, Mt. Washington, Orient Heights, and Powder Horn Hill.

The soils for much of the study area in the vicinity of Chelsea Creek are characterized as filled and/or altered lands, underlain by glacial and post glacial clay, peat, sand, and silt deposits. While large portions of the natural wetlands (e.g., tidal marshes) have been filled with a mixture of soils, gravels, rubble, and dredged materials to create dry land surfaces, the potential for natural undisturbed sediments are noted in Section 2.

1.4 Cultural Context

Cultural contexts are the organizational frameworks of information about aspects of history, architecture, archeology, engineering and culture that are based on a cultural theme and its geographic and chronologic limits. The Massachusetts Historical Commission (1980) divides these historic contexts into chronological periods to reflect broad patterns of historical, economic, and political development of the state. For the greater Boston area, human use and occupation commences around 12,000 years ago and is divided into eight pre-European contact and 6 post-European contact periods.

Reviewing on previous studies of the Boston Harbor Islands, estuary headwaters, and ponds around the Boston Basin, Cherau et al (2008) and Elia and Seashore (1989) characterize the general vicinity of Chelsea, East Boston and Revere as follows.

The earliest known Native American sites in the region date to roughly 12,000 to 10,000 years before present (BP). Evidence of sites during this period is extremely limited due to sea level rise over the past several millennia. Bourque (1980) notes those paleo-shorelines are currently 25 feet below sea level. There is very sporadic evidence of human activity for this period in the Boston area. Until 5000 BP, this area is characterized by a period of gradual inundation of coastal river systems and the creation of Boston Harbor. Most known sites are adjacent to rivers, lakes and marshes. A majority of sites for this period in the study area are probably underwater or under historic/modern fill deposits. It is not until the Late Archaic period (5000-3000 BP) that known site distribution indicates intensive exploitation of the marine and terrestrial coastal zone. Some sites dating 4000 to 5000 BP have been partially eroded or inundated (Cherau et al 2008).

The slowing sea level rise and stabilization of the shoreline appear to result in a more intensified settlement around Boston Harbor around 3000-1500 BP. The exploitation of shellfish resources intensifies during this period with the stabilization of sea levels and the resulting development of tidal flat habitat. By 1000-450 BP, intensive shellfish collecting and processing, seasonal fishing/fowling, and horticulture sites are widespread on coastal estuaries and islands around Boston Harbor. Settlement and subsistence patterns established at this time likely remained in use during the Proto-Historic and Contact (1500-1650). Unfortunately, a substantial epidemic in 1616-1617 severely affected much of the Native American population in the greater Boston area, with a resulting mortality rate of 80 to 90 percent. (Cherau et al 2008; Elia and Seasholes 1989).

A handful of Europeans could be found around Boston Harbor during the 1620s. In 1624, English had established themselves in the study area when Samuel Maverick built a fortified house at Winnisimmet (Chelsea). However, permanent settlement begins with the arrival of the Puritans in 1630. In 1631, a ferry was established between Chelsea and Boston (Charlestown). Deputy Governor Bellingham built a hunter lodge at Chelsea's Powderhorn Hill in 1659. East Boston was a series of islands with Noddles being the largest. Hog Island was used as grazing pasture. The study area was essentially divided into large farm estates with tenants living in East Boston in the early 1630s. (Cherau et al 2008).

Throughout the Colonial Period (1675-1775), the area remained largely farm and pasture land. A tide mill was erected at the head of Chelsea Creek in 1734. By 1739, the population of the Chelsea/Rumney Marsh (now Revere) area were able to build and support a meeting house, and separated from Boston. Roads connected Hog and Noodles Islands, and a bridge across Chelsea Creek connected those families to Chelsea (Cherau et al 2008). Following the Battle of Lexington and Concord on April 19, 1775, the Provincial militia forces placed the British forces in Boston under siege. The Battle of Chelsea Creek took place on May 27-28, 1775, when militia forces entered the area to capture, drive off, and/or destroy supplies, livestock and other forage stockpiled by British forces on the nearby Boston Harbor islands. British forces, including HMS *Diana*, attempted to drive off the militia. Under heavy shore fire, the British were forced to abandon the HMS *Diana* after she grounded. The Provincials boarded the vessel

and removed equipment and supplies; the schooner was then set afire (Bossom 1900; Chamberlain 1908; McKay 1925; Clark 1964; Tentindo and Jones 1978).

After the Revolution and throughout much of the Federal Period, the East Boston (Noddles and Hog Islands) area returned to its role as grazing land and forage with only a few families in residence until the 1830s. These tenant farmers were supplying livestock, produce and shellfish to outgoing vessels and milk and hay to Boston residents. Chelsea developed as an agrarian community. During the War of 1812, Fort Strong was constructed at the east end of Camp Hill on Noddles Island (Cherau et al 2008; Elia and Seasholes 1989).

The early Industrial Period (1830-1870) is a period of population expansion and land development. Smith Hill on Noddles Island was leveled and the soil used to fill adjacent marsh. This period marks the beginning of Irish and Italian immigration into these communities, and a shift from single family houses to double and row houses. The waterfronts of Chelsea and East Boston supported a growing shipbuilding industry, which in turn spurred on the development of machine and boiler factories. The developing railroad and related heavy industry and freight transportation/storage would displace the declining shipbuilding trades. In general, most industrial development occurred along Chelsea Creek with numerous docks and shipyards built toward the confluence with the Mystic River/Boston Harbor. It is also a period of significant landfilling, especially in East Boston. As we move into the Late Industrial Period (1870-1915), populations continue to grow and change with the continuing influx of immigrants. The housing stock continues in a trend toward multi-family, multi-level homes and row houses. Heavy industry, ship and railroad maintenance, manufacturing trades, and warehouses replaced shipbuilding along the waterfront. Populations reach their peaks just after World War I. Landfilling and bulkheading activities continued to alter the landscape. The industrial, manufacturing, and maritime industrial base persists through World War II. After the war, warehousing and bulk storage joined by business to support the growing internal airport dominate the banks of Chelsea Creek (Cherau et al 2008; Elia and Seasholes 1989).

1.5 Research Questions

The project attempts to reasonably address several research questions. These questions include: What are the boundaries of the battlefield? Can battlefield components be identified in the area? Do current landscape features correlate with historic accounts? Are there any archeological remains that confirm the historic accounts? It is anticipated that data collected through archival research, reconstruction of the historic landscape, and ground-truthing the area will answer many questions.

2. The Battle of Chelsea Creek May 27- 28, 1775

By Craig J. Brown
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“27th. Saturday. About 200 men were detached to go to the Point to guard it. About 9 or 10 o. c. in the evening we heard the canon roar, and the small arms crack for about an hour, in the direction of Marblehead or Medford, as we thought. We have since learnt that it was Col. Putnam, & his men on Noddle’s Island, where he engaged the regulars, and took 300 sheep, & 200 lambs. One ship run aground, & they burnt it.”

--- Samuel Bixby (1775: 285)

2.1 Introduction

The Battle of Chelsea Creek is the name rightly given to the military actions that occurred on Noddle’s Island (East Boston), Hog’s Island (Orient Heights), and along the Chelsea (Chelsea and Revere) shoreline on May 27 – June 10, 1775. The affair began on May 27th as a large-scale livestock raid by Provincial Militia (American) and developed into what military analysts term a meeting engagement¹ as Royal Marines (British) moved to intercept. This action culminated in a vicious encounter during the early morning hours of May 28th at Winnisimmet Ferry, where the *HMS Diana* ran aground and was burned. Provincial Militia returned to Noddle’s Island on subsequent occasions from May 29st – 31st to finish removing the remaining livestock and render the island unfit for use by the Royal Army and Navy. In the process, the fine mansion house occupied by Henry Howell Williams, a man then serving as a quartermaster in the Provincial Army was razed and the family left destitute. An attempt by Provincial forces to occupy and fortify Noddle’s Island on June 3rd failed under bombardment from the Royal Navy. Both sides decided to quit the island after an inconsequential skirmish on June 10th. Neither the Provincials nor the Regulars attempted to take possession of Noddle’s Island again during the Siege of Boston and the island became something of a no-man’s land between the contending parties.

2.2 The Siege of Boston

Sandwiched between the epochal events at Lexington and Concord (April 19, 1775) and the Battle of Bunker Hill (June 17, 1775), the Battle of Chelsea Creek (May 27-28, 1775) is often overshadowed by these more famous actions. Even for someone like Samuel Bixby, a private in Captain Isaac Bolster’s Company of Colonel Ebenezer Learned’s Massachusetts Regiment stationed at Roxbury, the Battle of Chelsea Creek was just another skirmish during those heady tumultuous days leading up to the Battle of Bunker Hill. Historians have likewise expended little ink in relating the events of the Battle of Chelsea Creek. Richard Frothingham in his landmark

¹ A “meeting engagement” is defined as a combat action when a moving force, incompletely deployed for battle, engages an enemy at an unexpected time and place (U.S. Dept. of Defense JP1-02: 295).”

work, *History of the Siege of Boston* (1849), devoted slightly less than two pages to the battle. Allen French was less generous in his *The Siege of Boston* (1911), summing up the removal of livestock from the islands of Boston Harbor prior to the Battle of Bunker Hill in a mere two paragraphs. Richard M. Ketchum gave a respectable account of the Battle of Chelsea Creek in *Decisive Day: The Battle for Bunker Hill* (1974), although he does not mention the contribution made by Colonel John Stark's 1st New Hampshire Regiment. It was not until Robert D. McKay's *The Battle of Chelsea Creek: An Account of the Second Engagement of the American Revolution, May 27, 1775* (1928) and Vincent Tentindo & Marylyn Jones' meticulously researched and well written *Battle of Chelsea Creek May 27, 1775 (Graves' Misfortune)* (1978) that the battle was given the singular attention that it deserves.

The Battle of Chelsea Creek is not simply another skirmish to be seen as a prelude to the Battle of Bunker Hill. In many ways, the events of May 27th – June 10th, 1775 are as integral to understanding the Siege of Boston as Lexington and Concord and Bunker Hill. As such, the Battle of Chelsea Creek merits similar attention. The Siege of Boston can be understood as evolving through three distinct, but overlapping phases. The first phase was largely organizational, beginning with General Artemas Ward taking command of the provincial forces following Lexington and Concord. This phase ended with appointment of George Washington as Commander in Chief and the creation of the Continental Army following his arrival in Cambridge on July 2, 1775 (Griffith 2002; Lancaster 1971). The second phase began when both armies realized that vital stores of livestock, fuel, and hay needed for the survival of the British garrison trapped in Boston lay unsecured on the islands ringing Boston Harbor. Armed conflict was inevitable as the British attempted to obtain these supplies and the Provincial Militia intervened to prevent it (Frothingham 1849). The final phase was the actual military envelopment of the city of Boston marked by the Battle of Bunker Hill June 17, 1775, the American occupation of Dorchester Heights, and the evacuation of Boston by the British on March 17, 1776 (Ketchum 1974; French 1911; Frothingham 1849). This preliminary paper seeks to examine the Battle of Chelsea Creek in its proper historical context as part of the second phase of the Siege of Boston.

An understanding of the events surrounding the Battle of Chelsea Creek is also important within the larger context of the American Revolution. The Battle of Chelsea Creek is significant for the manifestation of a number of "firsts:"

1. The Battle of Chelsea Creek was the first planned offensive by Provisional forces in the Revolutionary War that resulted in an engagement. Benedict Arnold's and Ethan Allen's capture of Fort Ticonderoga on May 9, 1775 was successful without a shot being fired.
2. The Battle of Chelsea Creek was the first instance of military cooperation by parties from different colonies in defense of their constitutional rights. Of the men selected to carry out the raid on Noddle's and Hog Islands, Colonel John Nixon and his men were from Massachusetts, but Colonel John Stark and his men were from New Hampshire. General Israel Putnam, the raid's commander, was from Connecticut. It was the first action undertaken by the Army of the United Colonies.
3. The Battle of Chelsea Creek was the first naval engagement of the Revolutionary War. The "Gaspee Affair" occurred on June 9, 1772 and the "Battle of Machias" did not occur until June 11, 1775.

4. The Battle of Chelsea Creek was the first time the Provincials captured a British ship of war during the Revolution.

5. The Battle of Chelsea Creek saw the first use of artillery by the Provincials in the revolutionary cause (Bossom 1900; Tentindo and Jones 1978; Mastone 2011).

More significantly, perhaps was that the Battle of Chelsea Creek saw the beginnings of the American Army and the adoption of a strategy that would serve the Provincials well in other theaters throughout the war. The idea of interdicting supplies in order to make the city of Boston untenable and force the evacuation of the British garrison proved to be successful. George Washington's mounting of heavy guns on Dorchester Heights in March of 1776 was not the only reason the British chose to withdraw from Boston. Had they adequate supplies of food and fodder, it is likely that the British would have contested control of Dorchester Heights with more vigor than they did. The Americans would turn to this strategy again throughout the war and it proved conclusive in bringing the war to a successful end (Bowler 1975; Hsiung 2007).²

2.3 The Battle of Chelsea Creek May 27 – 28, 1775

2.3.1 Preliminary Actions April 19-May 24, 1775

After the Battle of Lexington and Concord on April 19, 1775, Provincial militia units began systematically encircling the city of Boston, placing the British Regular army garrison commanded by Governor-General Thomas Gage under siege. Lacking a navy to challenge British control of Boston Harbor, Provincial leaders quickly realized the importance of the large supplies of livestock and fodder that lay unsecured on the Harbor's islands and coastal farms. It was long-standing British practice to supplement their rations with fresh meat and produce purchased from local farmers. Interdiction or seizure of these supplies would force Gage to import everything needed to sustain the people and troops in Boston. This would necessitate a long and tenuous line of communication to British possessions in Nova Scotia and ultimately back to England itself. Provincial leaders understood that it was probably impossible to cut off the flow of supplies entirely, but if they could reduce them to being intermittent then it could have a crippling impact on the British soldiers in Boston and render the city itself untenable.

To institute the interdiction of supplies bound for Boston, the Massachusetts Committee of Safety passed a resolution on May 7th ordering the Selectmen and Committee of Correspondence for the town of Chelsea "to take effectual methods for the prevention of any Provisions being carried into the Town of *Boston*, as may be sufficient for that purpose (Massachusetts Committee of Safety 1775: 753)." This resolution created something of a problem. The Selectmen and Committee of Correspondence for Chelsea lacked the authority and wherewithal to call on the Provincial Army for assistance in implementing this directive and without it they could do little more than back appeals to the greater public good with threats. The local farmers found themselves caught in a perilous position. William Harris, manager of Oliver Wendell's farm on Hog Island, confided to a friend that he felt "very uneasy, the people from the Men of War frequently go to the Island to Buy fresh Provision, his own safety obliges him to sell to them, on the other Hand the Committee of Safety have threatened if he sells anything to the

² The defeat of Burgoyne's army at Saratoga in 1777 and the success of Nathaniel Greene's Southern Campaign which ended with the defeat of Cornwallis at Yorktown in 1778 relied on this strategy.

Army or Navy, that they will take all the Cattle from the Island, & our folks tell him they shall handle him rufly (Prentiss 1775).”

The British authorities in Boston knew full well what the Provincials were doing and had no intention of allowing an interruption in the flow of critical supplies from local farms into the city. There is evidence that General Gage contemplated a move toward Chelsea as early as May 10th. On that date a man named Elijah Shaw testified before the Massachusetts Committee of Safety that he heard Gage himself say that “the Troops would soon make a push either towards *Dorchester Neck* or *Chelsea*... (Massachusetts Committee of Safety 1775: 753-754).” Shaw also testified that the British had visited his farm and liberated a large number of animals and five tons of hay.³ Gage was in fact sending out small detachments of fifty men as foraging details at this time (Barker 1774-1776).

Provincial leaders realized that stronger measures would be required if they were to stop supplies from reaching the British garrison in Boston. The Massachusetts Committee of Safety revisited the issue in session on May 14th and decided that the best way to prevent the livestock and hay from falling into enemy hands was to remove it altogether. The Committee issued a resolution “that all the live-stock be taken from *Noddle’s Island*, *Hog Island*, and *Snake Island*, and from that part of *Chelsea* near the seacoast, and be driven back (Massachusetts Committee of Safety 1775: 757-758).” This job was entrusted to the “Committee of Correspondence and Selectmen of the Towns of *Medford*, *Malden*, *Chelsea*, and *Lynn*, and that they be supplied with such men as they shall need, from the Regiment now at *Medford* (Massachusetts Committee of Safety 1775: 757-758).” This proviso provided the military muscle for what had been a largely civilian undertaking up to that point.

Ultimately, no action would be taken under the May 14th resolution. The regiment then at Medford was the 590 men of the 1st New Hampshire under Colonel John Stark. Stark was a frontiersman of some note, having been a longtime confederate of Robert Rogers and serving as a ranger captain during the French and Indian War (1754-1763). Tradition says that when Stark heard of the actions at Lexington and Concord, he “without a moments delay... shut down his mill, repaired to his house, took his gun and ammunition, mounted his horse in his shirt sleeves... and rode on to meet the enemy (La Bree 2007: 55).” Along the way Stark called for volunteers, so by the time he reached Lexington he had accumulated a large following. Stark was directed to Cambridge, where he presented himself to General Ward on April 21 (Stark 1877; La Bree 2007). Stark was given a commission in the Massachusetts militia until such time as it took New Hampshire Provincial authorities to get organized (Kidder 1868; La Bree 2007). While Stark was then operating under the auspices of Massachusetts, it was still the responsibility of New Hampshire to equip and pay his men. By May 18th, New Hampshire still had not done either. “I humbly pray that you would maturely consider our defenceless situation,” Stark wrote, “and adopt some measure or measures whereby they may be equipped (Stark, Colonel John 1775).” Stark commanded a regiment that was not yet ready to fight.

While Provincial leaders struggled to organize their army, General Gage continued to send out foraging parties to gather supplies wherever they could find them. On Sunday, May 21st, Gage

³ Shaw testified to the loss of “eleven cows, three calves, a yearling heifer, forty-eight sheep, sixty-one lambs, four hogs and poultry, hay five tons, and almost all his furniture (Massachusetts Committee of Safety May 10, 1775).”

enlisted the cooperation of Vice Admiral Samuel Graves, Commander of the North Atlantic Squadron, in dispatching an armed schooner and two sloops from the Royal Navy with a detachment of 100 troops to Grape Island for the purpose of acquiring the livestock and hay stored there. The island was a part of the town of Hingham and was owned by Elisha Leavitt, a wealthy loyalist who had offered or sold the supplies to Gage. The approach of the ships alarmed the neighboring towns who responded with militia. General Thomas in command at Roxbury sent three companies to assist. The militia gathered at a point of land across from Grape Island, but was prevented from crossing by the low tide. They opened fire on the redcoats on the island, but the range was too great for them to do any damage. The ships responded with cannon fire, while the militia was forced to hunker down to wait for the rising tide. Eventually, they were able to cross, but by that time the Regulars had made good their escape taking what they could with them. The militia contented themselves with setting fire to Leavitt's barn, with some 80 tons of hay still inside, and with removing the remaining livestock (Frothingham 1849; Bouvé, *et al* 1893; Klein 2008).

The British raid produced a flurry of activity among Provincial leaders. The success of the raid clearly demonstrated that Gage was not going to sit idly by while the Provincial army organized itself and completed its siege of Boston. The Massachusetts Committee of Safety in session drafted a resolution on May 23rd, not to the Selectmen or Committees of Correspondence of the individual towns, but to the Provincial Congress urging them to use their authority to secure the supplies of livestock and fodder on the Harbor Islands and seacoast (Massachusetts Committee of Safety 1775: 762). The Massachusetts Provincial Congress responded immediately by drafting a resolution of their own that read much like the Committee of Safety's resolution of May 14th (Massachusetts Provincial Congress 1775: 818). Not satisfied, the Committee of Safety passed a stronger resolution on May 24th: "*Resolved*, That it be recommended to Congress immediately to take such order respecting the removal of the Sheep and Hay from *Noddle's* Island, as they may judge proper, together with the stock on adjacent islands (Massachusetts Committee of Safety 1775: 763)." There is no written record of an order being sent to the army at Cambridge, but we know that this time they saw fit to act.

2.3.2 *Opening Movements May 24-26, 1775*

In compliance with the Committee of Safety and Provincial Congress resolutions of May 23rd and 24th, Major General Artemas Ward, Commander-in-Chief of the Provincial militia, convened a council of war to discuss the removal or destruction of all supplies on *Noddle's* and *Hog's* Islands (Putnam 1786; McKay 1925; Tentindo and Jones 1978). There is no contemporary record of this council of war; however, it must have taken place during the evening of May 24th or early hours of May 25th.⁴ This council was likely attended by the general officers and senior colonels then in and around Cambridge, Colonel Stark and Colonel John Nixon⁵ who would carry out the raid among them. Overall command of the raid was given to Connecticut General Israel Putnam.

⁴ It must have taken place in the interval of time between the resolutions of May 23rd and May 24th being issued and the morning of May 25th, when spies delivered word of the planned raid to General Gage.

⁵ Colonel John Nixon was of Sudbury, Massachusetts. He possessed a wealth of experience having served in the Provincial Militia since 1735, taking part in King George's War (1744-1748) and the French and Indian War (1754-1763) (Gardner 1914).

Like John Stark, Israel Putnam was another former ranger having served with Robert Rogers during the French and Indian War and Pontiac's Rebellion (1763-1766). "Old Put" had already endeared himself to the people of Boston. When Gage closed the Port of Boston in compliance with the Intolerable Acts in May 1774, Putnam drove a flock of sheep up from Connecticut to help alleviate the suffering of the people of Boston. Putnam was hard at work in the fields on his farm outside of Pomfret, Connecticut when he received the news of Lexington and Concord. He then put up his plow and, leaving instructions for his regiment to follow, rode on to Cambridge, where he arrived on April 21 (Tarbox 1876; Livingston 1901). Some have said that he arrived just in time to see some of the New Hampshire men parading (French 1911). Putnam is the only one to have left a written account of the May 24th council of war; however, this was not until more than a decade after the fact. Putnam wrote: "it was unanimously agreed among the general officers that it was absolutely necessary to remove the Stock and Effects from said Island in order to prevent the Enemy receiving any Supplies of provisions &c. And accordingly a party of troops were Detached for the above purpose and put under my Command (Putnam 1786)."

Secrecy was not maintained and spies passed information of the Provincial's plan to General Gage. In a note to Vice Admiral Graves dated during the morning of May 25th, Gage wrote: "I have this moment received Information that the Rebels [intend] this Night to destroy, and carry off all the Stock & on Noddles Island, for no reason but because the owners having sold them for the Kings Use: I therefore give you this Intelligence that you may please to order the guard boats to be particularly Attentive and to take such Other Measures as you may think Necessary for this night (Gage 1775)." Graves concurred and suggested the added measure of landing "A Guard upon the Island [as] the Most probable Means of preserving the Hay from being destroyed (Graves 1775b)." It is unclear if a guard was sent to the island. Lieutenant John Barker of the King's Own Regiment in Boston recorded: "50 Men order'd last night; did not go on account of the tide not serving (Barker 1774-1776: 50)." As far as the Navy was concerned, it was not just the livestock and hay that was important; Graves had set up a naval storehouse on the island. At any rate, these precautions were in vain. Gage had accurate information as to the Provincials' plan, but he had the wrong day.

2.3.3 The Battle of Chelsea Creek May 27-28, 1775

The Provincials did not move until May 26th and when they did it was with a professionalism one would not normally expect from a large body of amateur soldiers from different colonies who were working together for the first time. At 6:15 am a scouting party made up of 32 men drawn from several companies of Colonel Samuel Gerrish's Regiment was dispatched to Chelsea (Bossom 1900). The job of this scouting party was not to find the proper route of march to Hog Island and Noddle's Island, Captain Sprague's Company in Chelsea knew the way if no one else did, it was to secure the line of march. It was their job to act as a picket force, to warn the main column that was to follow of any approach by the Regulars and make sure any civilians encountered did not run off to the British to warn of the Provincial movement.

On the night of May 26th, a party of 200 to 300 men under the command of Massachusetts Colonel John Nixon marched out of the Provincial camp at Cambridge and proceeded to Medford where they joined another 300 men under the command of New Hampshire Colonel John Stark. The choice of Colonel Nixon's Regiment is somewhat surprising. Just that morning,

four full companies mutinied, protesting alterations made to their elected officers (Bullard, et al 1775)⁶. This necessitated the addition of small detachments of ten to fifteen men taken from different regiments to augment the forces being sent to Hog and Noddle's Islands. We know the names of at least two of these small detachments: the 11 men with Corporal Amos Farnsworth of Captain Henry Farwell's Company, Colonel William Prescott's Regiment; and the 16 men with Major Thomas Poor of Colonel James Frye's Regiment. Nixon marched his men out of Cambridge along the Old County Road, crossing the Mystic River at the old bridge and ford, and on to Medford (Mystic), where he rendezvoused with Stark. Together, this 600 man contingent of Massachusetts and New Hampshire militia marched out along the Old County Road (the road to Salem) through Malden, and on to the meetinghouse in Chelsea (Farnsworth 1775-1779).⁷ It is impossible to know the precise timing of the march to Chelsea, but it is likely that Stark and Nixon reached the meetinghouse during the early morning hours of May 27th. They were likely joined at the meetinghouse by some of the 59 man "Chelsea Company" under Captain Samuel Sprague. Sprague's men were positioned throughout Chelsea with a fair number at Winnisimmet Ferry. Here the men halted to rest and have breakfast before moving on to the Sale Farm (Chamberlain 1908; McKay 1925; Tentindo and Jones 1978).

May 27th was a day of celebration for British Vice Admiral Samuel Graves, Commander of His Majesty's North Atlantic Squadron. Graves had recently received his promotion to Vice Admiral of the White. May 27th was the first day he raised his new flag (Figure 2.1). When the white flag was run up at 8 am, the squadron responded with a salute of 13 guns (Graves 1775a; Robinson 1775a). That morning also saw the *HMS Diana*, commanded by Graves's nephew Lieutenant Thomas Graves, return from a cruise to Maine (McCreight 1775). Graves had no children of his own and he was known to promote his nephew's interests whenever possible (Tentindo and Jones 1978). Once the *Diana* was safely moored off Noddle's Island, Lieutenant Graves reported to his uncle aboard the *HMS Preston*.

At about the same time that Graves was receiving his salute, Stark and Nixon were leading their men away from the Chelsea Meetinghouse. Using a small farm lane leading from the Meetinghouse, they reached the Sale Farm between 9 and 10 AM. At the Sale Farm, Stark and Nixon made their final dispositions while waiting for low tide and at 11 AM made the crossing of Belle Isle Creek to Hog Island (De Guines 1775). Once Stark and Nixon gained Hog Island, they divided their men into smaller detachments to round up the livestock and set fire to any stores of hay that could be found. The work progressed slowly, but some 411 sheep, 27 horned cattle, and 6 horses managed to be herded back to the mainland (Farnsworth 1775-1779; Anon 1775c).

Sometime during mid-afternoon, around 2 PM perhaps, a small 30 man detachment was sent across Crooked Creek to Noddle's Island to begin work there. Amos Farnsworth, a corporal in Captain Henry Farwell's Company of Colonel William Prescott's Massachusetts Regiment, was a member of this party. His journal provides the only primary documentation we have of this

⁶ The four companies in question were those under Captain Benjamin Bullard, Captain Thomas Drury, Captain John Leland and Captain Thadeus Russell.

⁷ The route of march correlates to the original route to and from Boston for those living in Chelsea and points east. Provincial forces would have been screened from the British by a series of hills and marshes along the Chelsea shore enabling them to travel the entire route undetected.

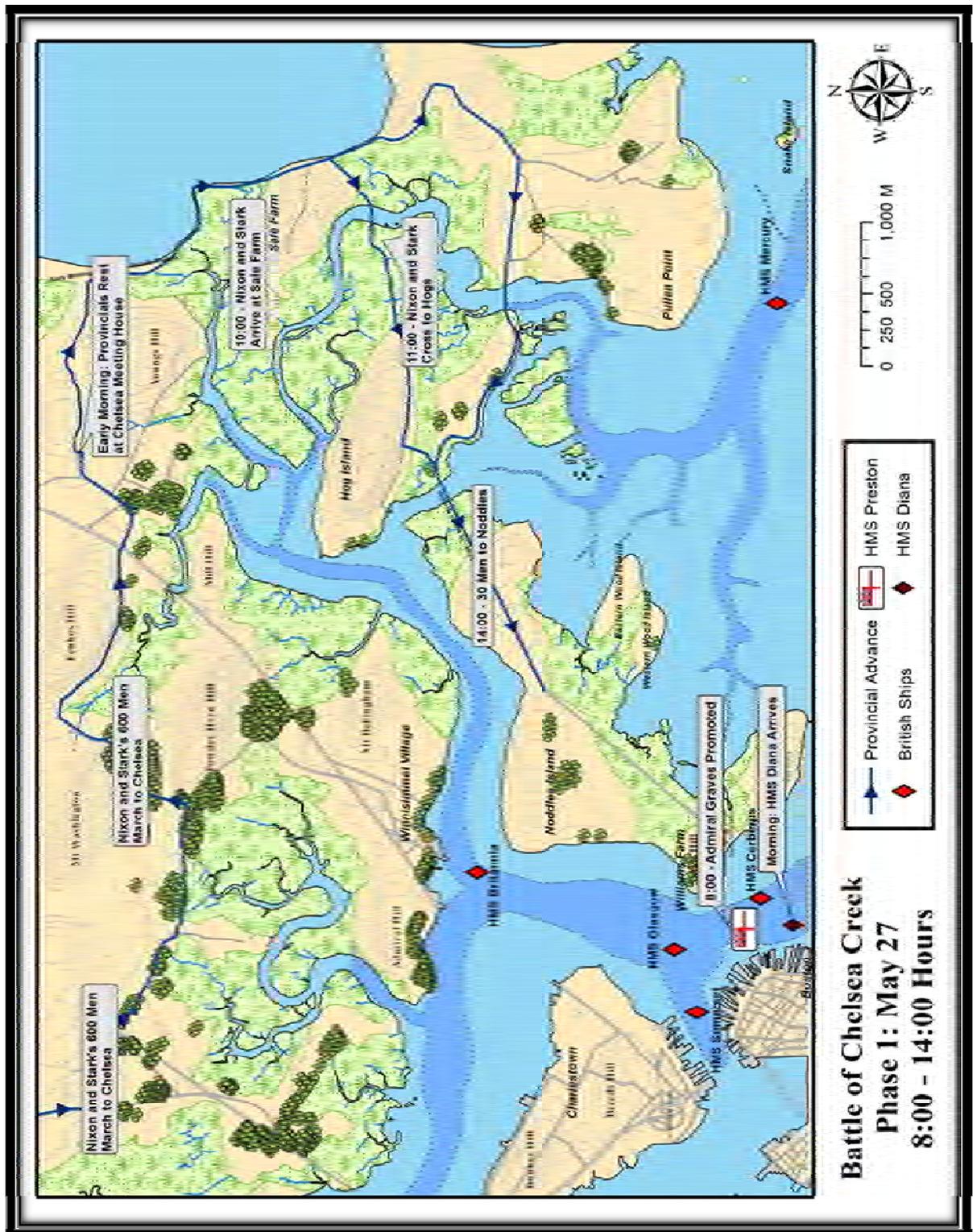


Figure 2.1. Time series map depicting battlefield events between 8:00 – 14:00 hours on May 27, 1775.

initial phase of the battle. Farnsworth relates that the men “sot one Hous and Barn on fiar Kil^d Some hoses and Cattel Brought of[f] two or three Cows one horse (Farnsworth 1775-1779: 81).” General Putnam explained the rationale behind this action: “And it was agreed among the General Officers that if the Stocks and provitions... could not be got off the said Island without grate hazzard and loss of the American troops, that in that case, it would be Expediant to Desstroy or Consusme the farme, which was Accordingly Done... (Putnam 1786).”

The columns of smoke rising into the air from the burning house and barn were the first indication the British had that something was afoot on Noddle’s Island (Figure 2.2). Captain John Robinson of the *HMS Preston* first noticed the smoke shortly after 2 PM (Robinson 1775a). Robinson alerted Vice Admiral Samuel Graves, who issued orders to intercept the Provincials. “Upon observing the Rebels landed on Noddles Island,” Graves wrote, “I ordered the *Diana* to sail immediately between it and the Main, and get up as high as possible to prevent their Escape, and I also directed a party of Marines to be landed for the same purpose (Graves 1775d).”⁸ At 3 PM the signal was given for the squadron to land the Marines. The Royal Marines that landed on Noddle’s Island came from the contingents that served aboard the *HMS Somerset*, *HMS Preston*, *HMS Cerberus*, and *HMS Glasgow* approximately 170 men altogether (LeCras 1775a; Robinson 1775a; Chads 1775; Howe 1775). As the marines formed up on the beach, the *HMS Diana* entered Chelsea Creek, followed by 10 or 12 longboats, and began to make her way upstream to cut off the Provincial’s avenue of retreat. As soon as she entered Chelsea Creek, the *Diana* began taking small arms fire from the Provincial’s of Sprague’s Company positioned in buildings and behind stone walls at Winnisimmet Ferry (Bacon ADM 1/5307). The time was approximately 4 PM.

The 30 Provincials working on Noddle’s Island were as yet unaware that the British were moving on their position. It was not until they began withdrawing the livestock back toward Hog Island that they first came under fire from the *Diana* (Figure 2.3). The *Diana* had reached the mouth of Crooked Creek and, with a clear line of sight downstream, began shelling the Provincials as they made the crossing back to Hog Island (ADM 1/5307). The Royal Marines arrived at the crossing point as the last few Provincials made it across. Acting as a rearguard, half of the Provincials took up position in a ditch while the rest herded off the livestock. “Before we got from Noddels island to hog island we was fir^d upon by a Privatear Schooner,” Farnsworth wrote, “But we Crost the river and about fifteen of us Squated Down in a Ditch on the mash and Stood our ground. And thare came a company of Regulars on the marsh on the other side of the river And the Schooner: And we had a hot fiar until the Regulars retreated (Farnsworth: 1775-1779: 81).” During this exchange, two marines from the *HMS Somerset* were wounded (LeCras 1775a).

The withdrawal of the Royal Marines left the *Diana* and the longboats to continue the fight on their own. The sun was beginning to set, but both parties seemed unwilling to call it a day. Stark and Nixon appear to have divided their men again. While some of the men herded the livestock back across Belle Isle Creek and along the Beach Road back to the Chelsea Meetinghouse, it appears that another group moved through the marshes shadowing the *Diana* as she continued to make her way upstream. When the *Diana* reached a point opposite the area of Hasey’s Landing, Stark and Nixon attacked with small arms (Graves 1775d; McKay 1925; Tentindo and Jones

⁸ HMS *Diana*, Lieutenant Thomas Graves (the Admiral’s nephew) commanding, was a 120 ton schooner carrying 4 four pound cannon and 12 swivel guns. She was crewed by 30 men.

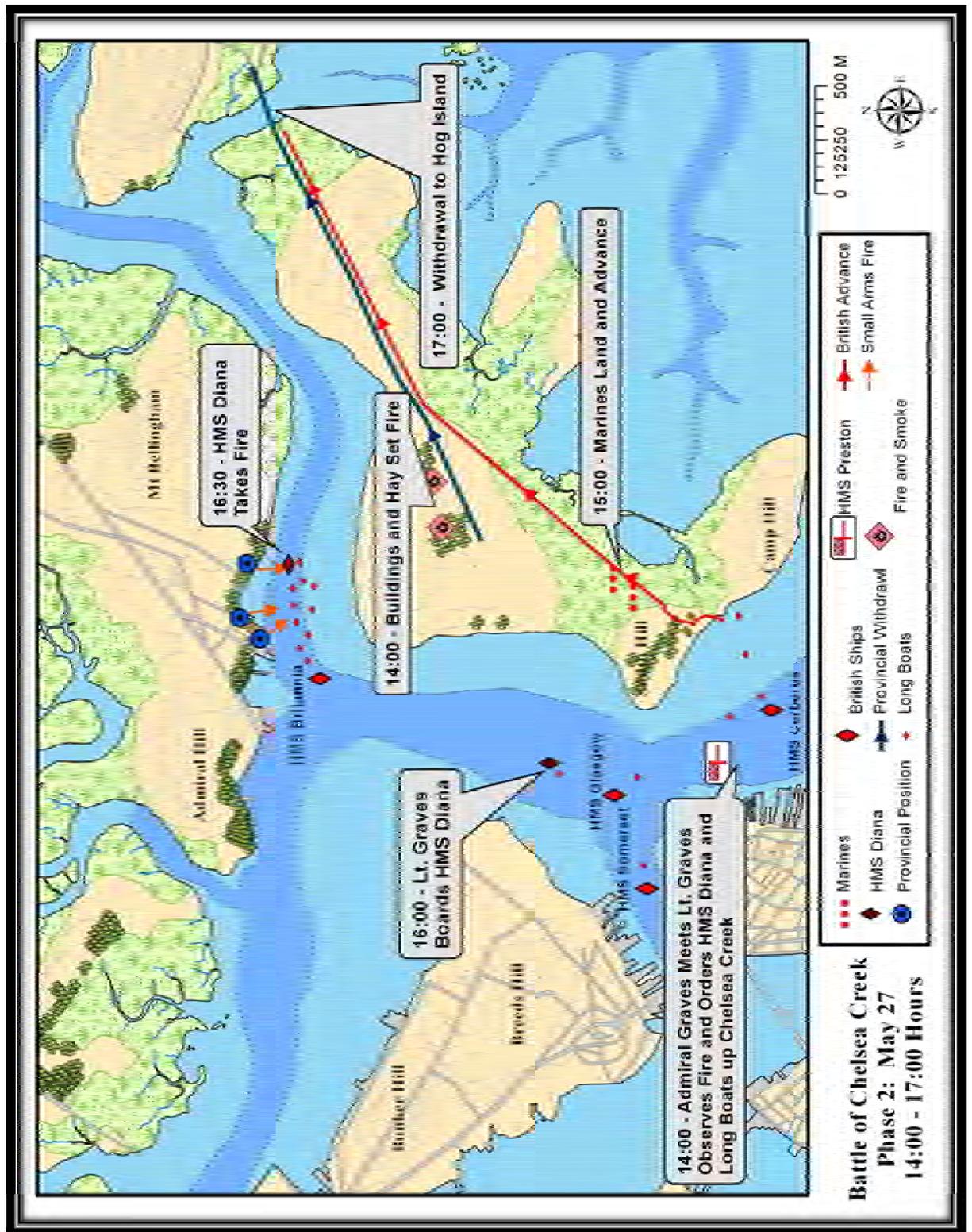


Figure 2.2. Time series map depicting battlefield events between 14:00 – 17:00 hours on May 27, 1775.

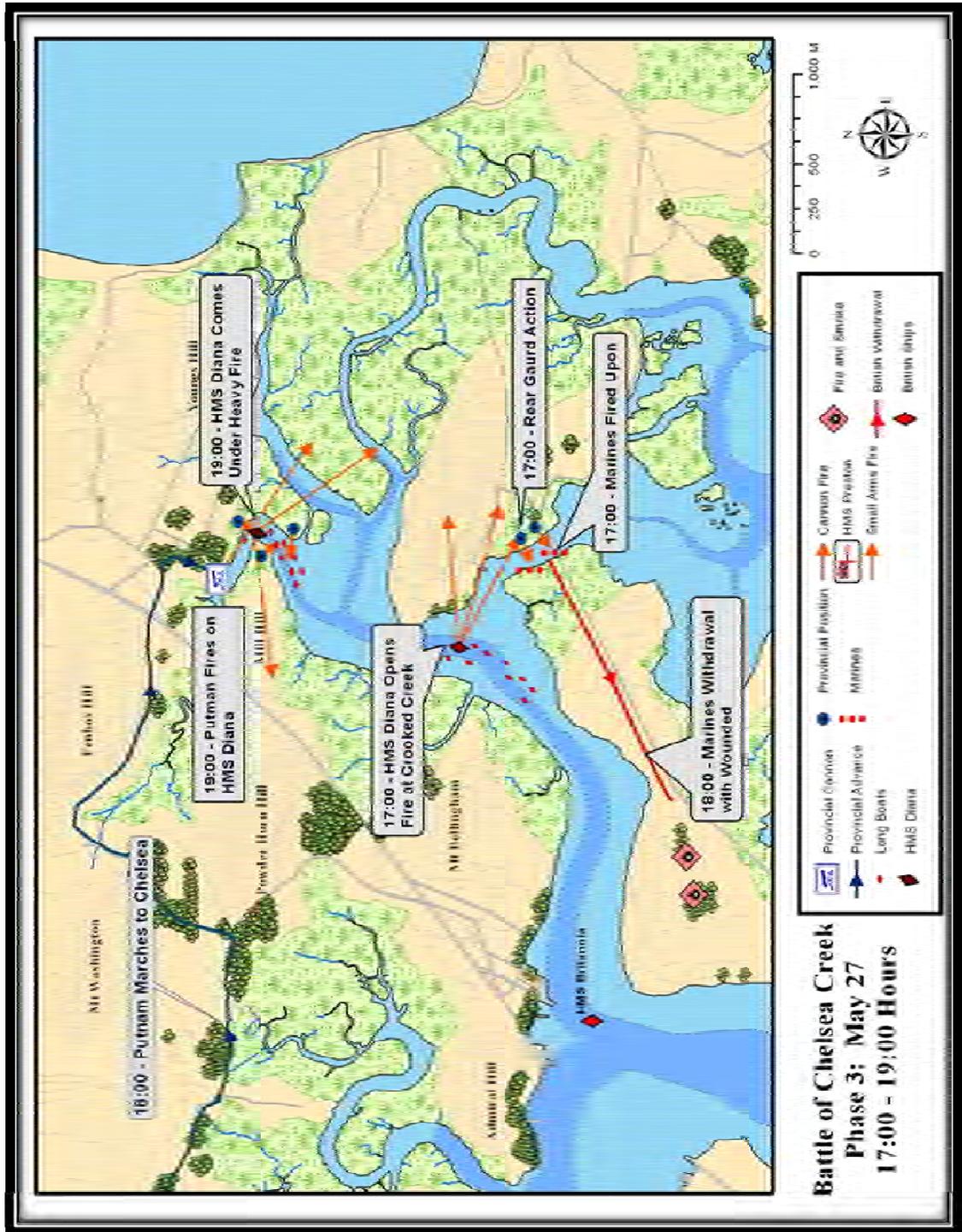


Figure 2.3. Time series map depicting battlefield events between 17:00 – 19:00 hours on May 27, 1775.

1978). The crew of the *Diana* reported only that they proceeded to Hog Island where they saw and engaged a large number of Provincials until they dispersed around 8 or 9 PM (ADM 1/5307). Other historical sources and possible battle related artifacts recovered from the area of the Newgate House near the Tide Mill in Revere make it clear that the *Diana* continued upstream.⁹

Back on Noddle's Island, the Royal Marines had taken up a position on West Head across Chelsea Creek from Winnisimmet Ferry. At 5 PM, the *HMS Cerberus* landed her quarter deck guns, two 3 pounder artillery pieces.¹⁰ These were manhandled up to the Marine position on West Head and placed so as to command the channel and cover the area of Winnisimmet Ferry (Chads 1775). Together with nearby ships the artillery commenced to bombarding the Provincial position (Anon 1775b; Chads 1775; Graves 1775d; Robinson 1775b). The role of the *HMS Britannia* at this stage of the battle is unclear. Primary sources (Farnsworth 1775-1779) do not mention her as following the *Diana* upstream, so it is likely that she stayed just off Winnisimmet Ferry, exchanging fire with Captain Sprague's people there.

In Cambridge, General Israel Putnam heard the cannonade commence around 5 PM. A short time thereafter, an express rider arrived with a request for reinforcements from Stark and Nixon. Putnam immediately resolved to march to Stark and Nixon's aid. Accompanying Putnam were Colonel James Frye's Massachusetts Regiment and a 2 gun section of 3 pounder artillery pieces under the command of Captain Thomas Waite Foster (Stevens 1775-1776; Anon 1775b). Putnam marched his force first to Mystic having heard that the Regulars were landing there. Seeing that this was not the case, he then double-quickened his men to Chelsea.

It was now approximately 8 PM. Darkness was closing in and the crew of the *Diana* found themselves in a precarious position. Lieutenant Graves had proceeded up Chelsea Creek almost as far as the Tide Mill. The wind had calmed and a strong tide threatened to beach him on the mainland within easy reach of the Provincials. Stark and Nixon had been able to establish a position on the elevation of Chelsea Neck (Anon 1775b). Graves found himself stranded in a sort of cul-de-sac, taking small arms fire from both shores. In order to extricate the *Diana*, Graves called the longboats to him and ordered them to take the ship under tow (Figure 2.4) (ADM 1/5307). Seeing an opportunity, the Provincials began trying to pick off the sailors manning the longboats (Chamberlain 1908).

Putnam arrived in the area with reinforcements at around 9 PM. Eyewitness Elizabeth Hasey related that Putnam set up Foster's artillery at the Newgate House and that the fire from them was so intense that it arrested the withdrawal of the *Diana* (Chamberlain 1908). It is indeed possible that Foster initially unlimbered his artillery in the yard of the Newgate House near the Tide Mill, but this is not confirmed by any other source. James Stevens, a private in Captain Benjamin Farnum's Company of Fyre's Regiment, said simply; "we got dow[n] within a quarter of a mile of the fery & then halted & our ofisers went to louk out to place the canon thay went round by the water while thay come in sight of the sconer when as son as the regerlers saw our

⁹ William T. Hall recorded that he used to dig up small cannon balls from the yard of the Newgate/ Yeamen House (Chamberlain 1908: 443).

¹⁰ At 6 am on May 28th, Gage would send two 12 pounder artillery pieces and 100 men from the 1st Marine Battalion to assist, but by then it was a case of too little and too late (Barker 1774-1776).

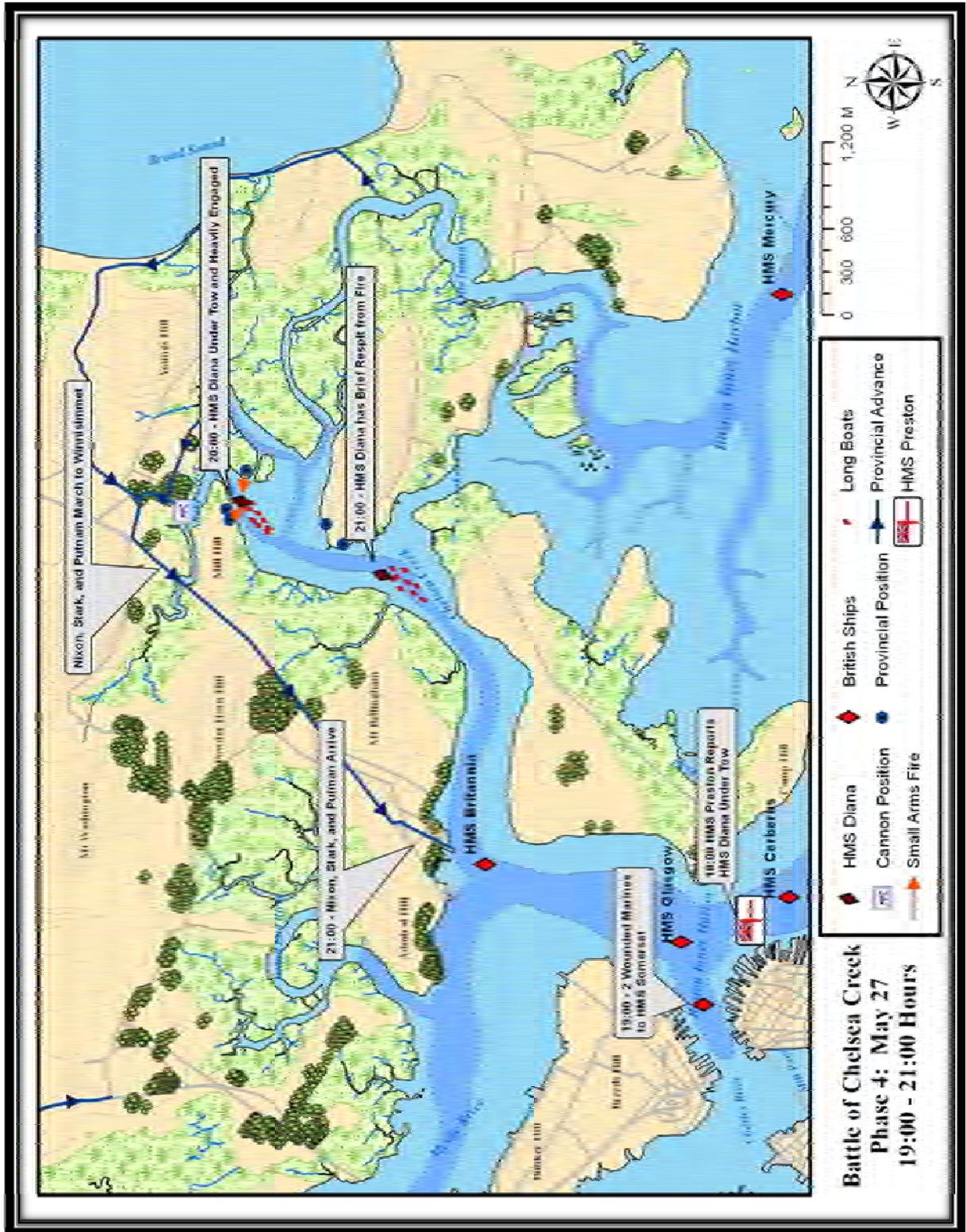


Figure 2.4. Time series map depicting battlefield events between 19:00 – 21:00 hours on May 27, 1775.

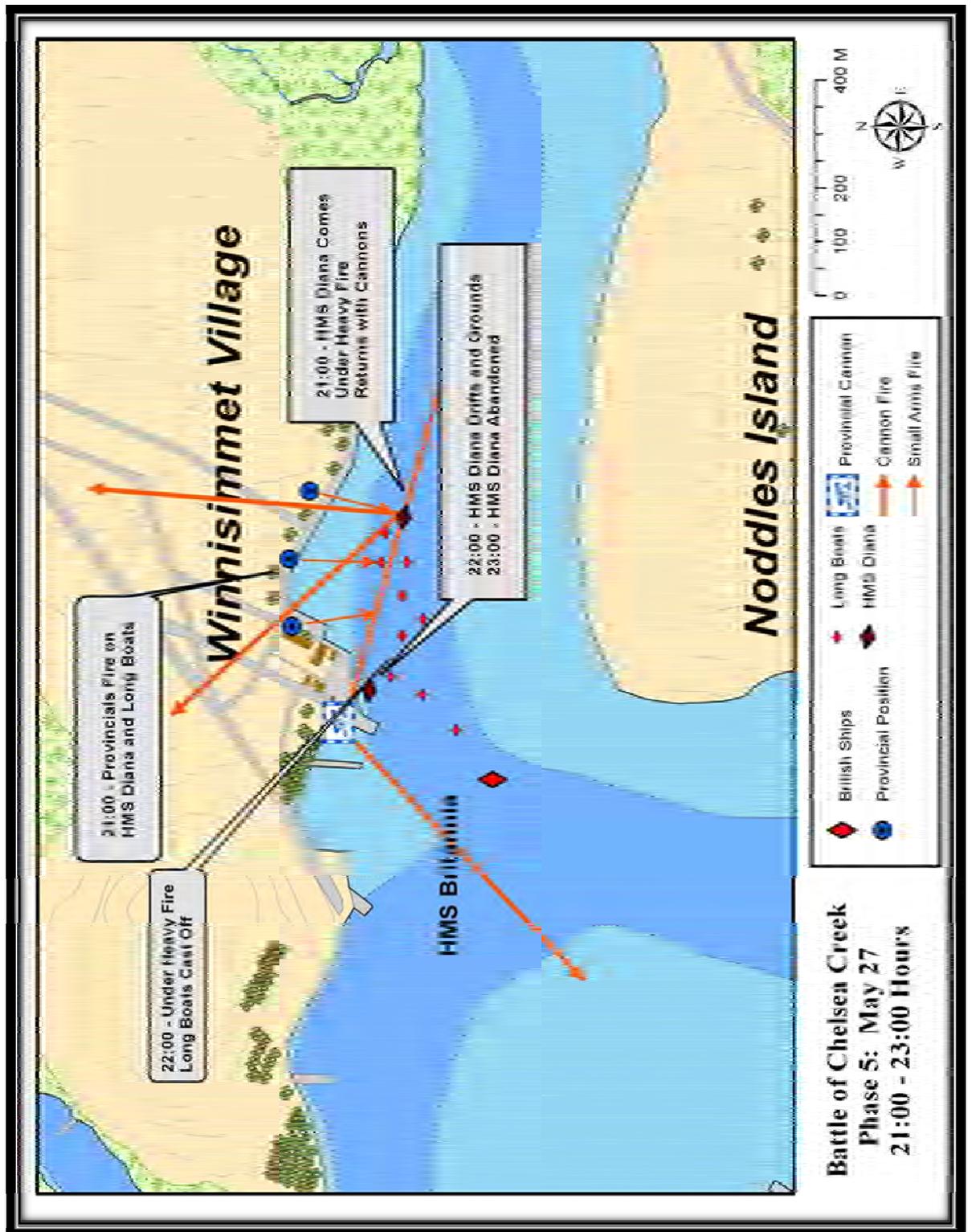


Figure 2.5. Time series map depicting battlefield events between 21:00 – 23:00 hours on May 27, 1775.

men they fired on them then the firing Begun on boath sides & fired very worm... (Stevens 1775-1776: 45-46).” Stevens’s description is interesting because it seems to be referring to an action taking place not at Chelsea Neck, but at Mill Hill. He goes on to say that there come a man & ordered us over a nol rit into the mouths of the canon we got on top of the nol & the grap shot & canon bauls com so thk that we retreted back to the rode & then marcht down to the fery (Stevens 1775-1776: 46).” Who the man is that Stevens mentions is unknown. It could be Stark, Nixon, or another officer that was on the scene. There is some speculation that it could have been Dr. Joseph Warren who was rumored to be accompanying Putnam (Tentindo and Jones 1978). At any rate, the retreat back to the road provided a bit of a respite for the crew of the *Diana* and the sailors in the longboats attempting to tow her. Broad marshes at the base of Mount Bellingham provided some cover causing a brief lull in the fighting.

At about 10 PM, as the *Diana* began to come abreast of Winnisimmet Ferry, she came under heavy small arms fire once more (Figure 2.5). By now, the buildings and stone walls lining this stretch of Chelsea Creek were full of Provincials. The sailors in the longboats were particularly vulnerable. These craft provided little cover and if they had been full, the carnage would have been awful. As it was, we know of only two men who were killed at this time, George Williams and William Crocke, both seamen from the *HMS Somerset* (LeCras 1775b). The Provincials managed to bring their artillery to bear and the longboats had no choice but to cast off and leave the *Diana* (ADM 1/5307). Caught in the tide she drifted toward the Chelsea shore and ground on the ferry ways shortly after 10 PM (ADM 1/5307; Stevens 1775-1776). Lieutenant Graves ordered his men to deploy the kedge anchor in attempt to drag the ship back into water. The crew connected the chain to hawser and tried to get the *Diana* to move, but it was no use. When she began to heal over, Graves ordered her braced. The tide continued to leave her and the bracing failed. When she rolled onto her beam ends and it was no longer possible to keep the deck and fire the guns, Graves ordered the *Diana* abandoned. The *Britannia*, who was now in supporting distance, came alongside to take the crew off at approximately 11 PM (ADM 1/5307; Stevens 1775-1776).

Graves was determined to continue the fight from the *Britannia*. It was his intention to wait until daylight and high tide to attempt to reboard the *Diana* (Figure 2.6). The Provincials set about plundering the ship of everything of value. This included the ship’s 4 four pound cannons, 12 swivel guns, rigging, sails, ammunition, money, and clothing. Just after midnight, on what was now May 28th, the crew on the *Britannia* noticed fire and smoke coming from the *Diana*’s companion (ADM 1/5307). A party of twelve Provincials, including Captain Isaac Baldwin of Stark’s Regiment and Sam Pratt of Chelsea, had piled hay under the bow of the *Diana* and set her on fire (Anon 1775a; Graves 1775d; Stevens 1775-1776, Farnsworth 1775-1779; Sumner 1858; Bossom 1900; Tentindo and Jones 1978). Graves mounted an attempt to retake the *Diana*, but was easily repulsed (ADM 1/5307). At approximately 3 AM, the fire reached the magazine and the ship exploded (ADM 1/5307; Stevens 1775-1776, Farnsworth 1775-1779; Sumner 1858; Bossom 1900; Tentindo and Jones 1978).

The burning of the *HMS Diana* brought an end to the major fighting along Chelsea Creek (Figure 2.7). Colonel Ephraim Doolittle arrived during the afternoon of May 28th with his 400 man regiment to relieve Nixon and Stark and secure whatever was left of the *Diana* (Henshaw 1775; Stevens 1775-1776). This touched off a fresh round of shelling from the British ships and

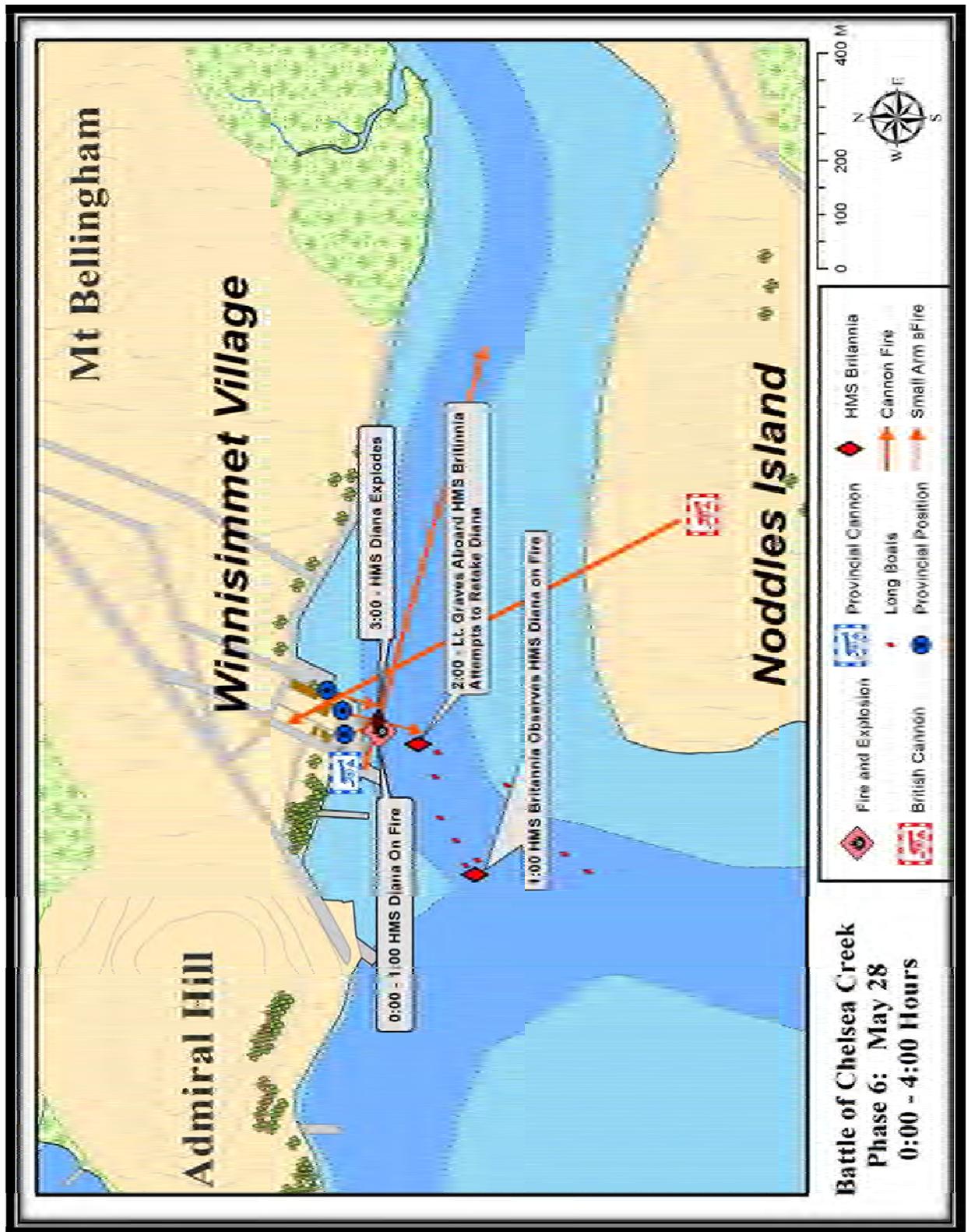


Figure 2.6. Time series map depicting battlefield events between 0:00 – 4:00 hours on May 28, 1775.

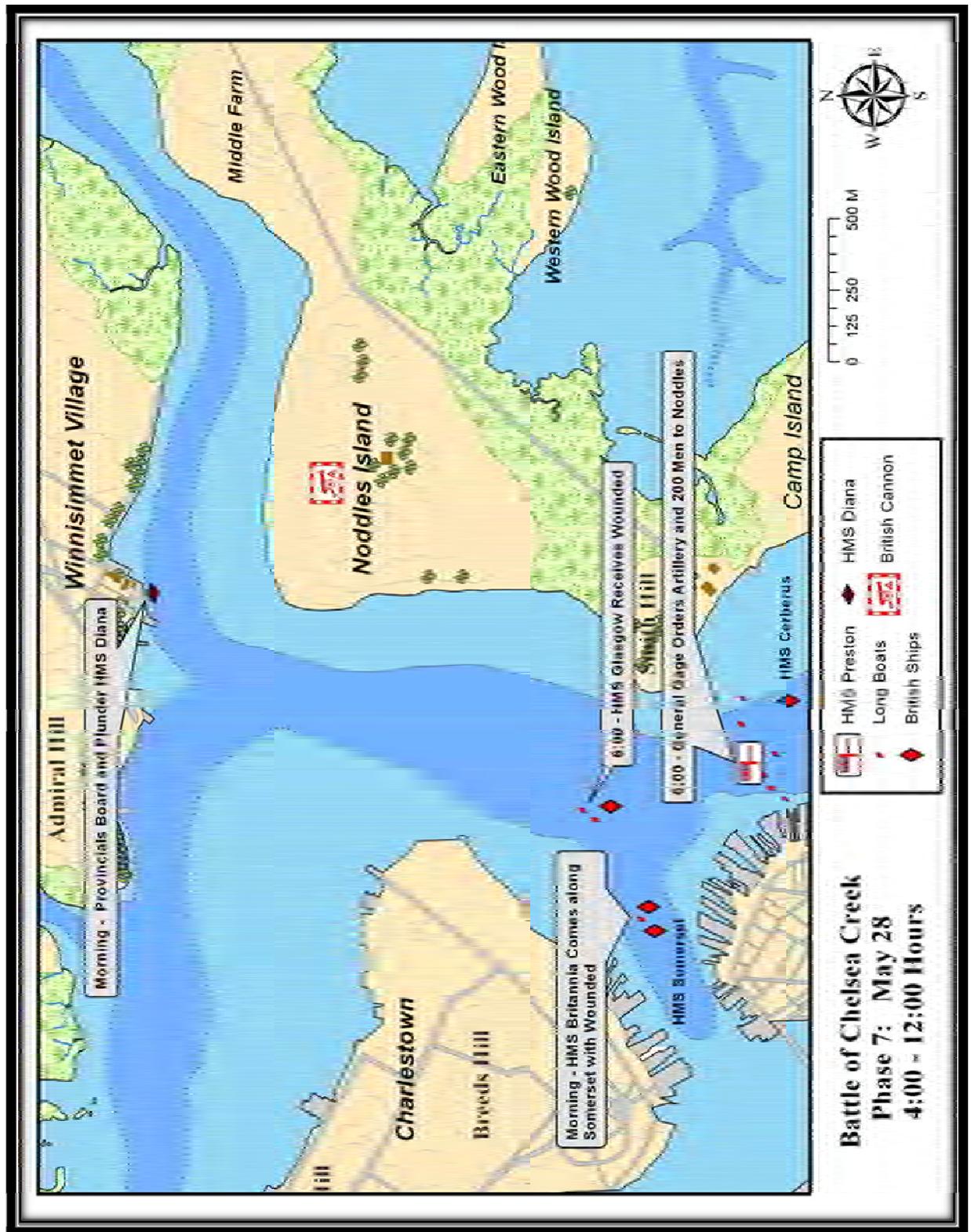


Figure 2.7. Time series map depicting battlefield events between 4:00 – 12:00 hours on May 28, 1775.

artillery position on Noddle's Island, but for all intents and purposes the main battle was over. Stark and Nixon withdrew to camps having relieved the British of a sizable number of livestock and several tons of hay (Figure 2.8). Estimates do vary, but in addition to what was taken from the *Diana*, the Americans also obtained 300 to 600 sheep and 40 head of cattle and horses. Losses for the entire action were extremely light. A total of 3 wounded for the Americans and 2 dead and several wounded for the British were reported (Anon 1775a; Graves 1775d; Williams 1775; McKay 1925; Tentindo and Jones 1978).

2.4 Subsequent Actions May 29-June 10, 1775

The destruction of the *HMS Diana* may have marked the end of the Battle of Chelsea Creek, but operations on Noddle's Island continued. The Provincials were prevented from accomplishing all of their objectives and were forced to return to Noddle's Island on several occasions from May 29th to June 10th. These subsequent actions on Noddle's Island are poorly documented, but are nonetheless significant. They demonstrate that while the fighting ended on May 28th the operation continued and was a clear cut American victory. The 30 man detachment that crossed from Hog Island to Noddle's Island during the midafternoon of May 27th was too small to do anything but begin the process of removing the livestock and fodder from the island. When this party withdrew there was still a great deal of work to be done. These subsequent actions are important from an archaeological standpoint as well.

The first of these subsequent actions took place on May 29th, when a party of Provincial (American) militia returned to Noddle's Island and began removing the remaining livestock. Lieutenant John Barker of His Majesty's Own Regiment quartered in Boston recorded in his journal that "[today] the Rebels were seen again on the same Island... they drove all the Cattle and Sheep off to the Main and set fire to four houses; at 8 oclock a house was set on fire at Hog Island... (Barker 1774-1776: 51-52)." Henry Howell Williams, owner of the fine mansion house (and livestock being liberated) on Noddle's Island, corroborated Barker's story. In a letter written to the Massachusetts Provincial Congress on June 12, 1775, Williams complained: "That on *Monday*, the 29th of *May*, the same or another number of said armed troops came again on to said island, and then and there did burn and destroy two other dwelling-houses, goods, &c., and three barns; and at the same time did take away and drive off from said island about five hundred old sheep, and about three hundred and forty lambs, with between thirty and forty head of horned cattle, the property of your memorialist, together with a further number of horses, hogs, &c., &c (Williams 1775)."

What is interesting about the May 29th Provincial incursion onto Noddle's Island is the British response. They did nothing. The marines that landed on Noddle's during the action on the afternoon of May 27th were still there, for at least a portion of the day. Captain John Robinson of the *HMS Preston*, the man who alerted Vice Admiral Graves to the Provincial presence on Noddle's on May 27th, saw nothing. Robinson recorded only that he "made the Signals for all boats, and sent them to take marines off Noddle's Island (ADM 51/720)." Instead of moving to engage the Provincials and protect the valuable livestock and fodder, the Royal Navy decided to leave the island. General Thomas Gage in Boston went so far as to order all the light infantry companies to parade in preparation for a move toward Noddle's, but then must have thought better of it. Lieutenant Barker recorded that "[we] were immediately order'd to parade... In about

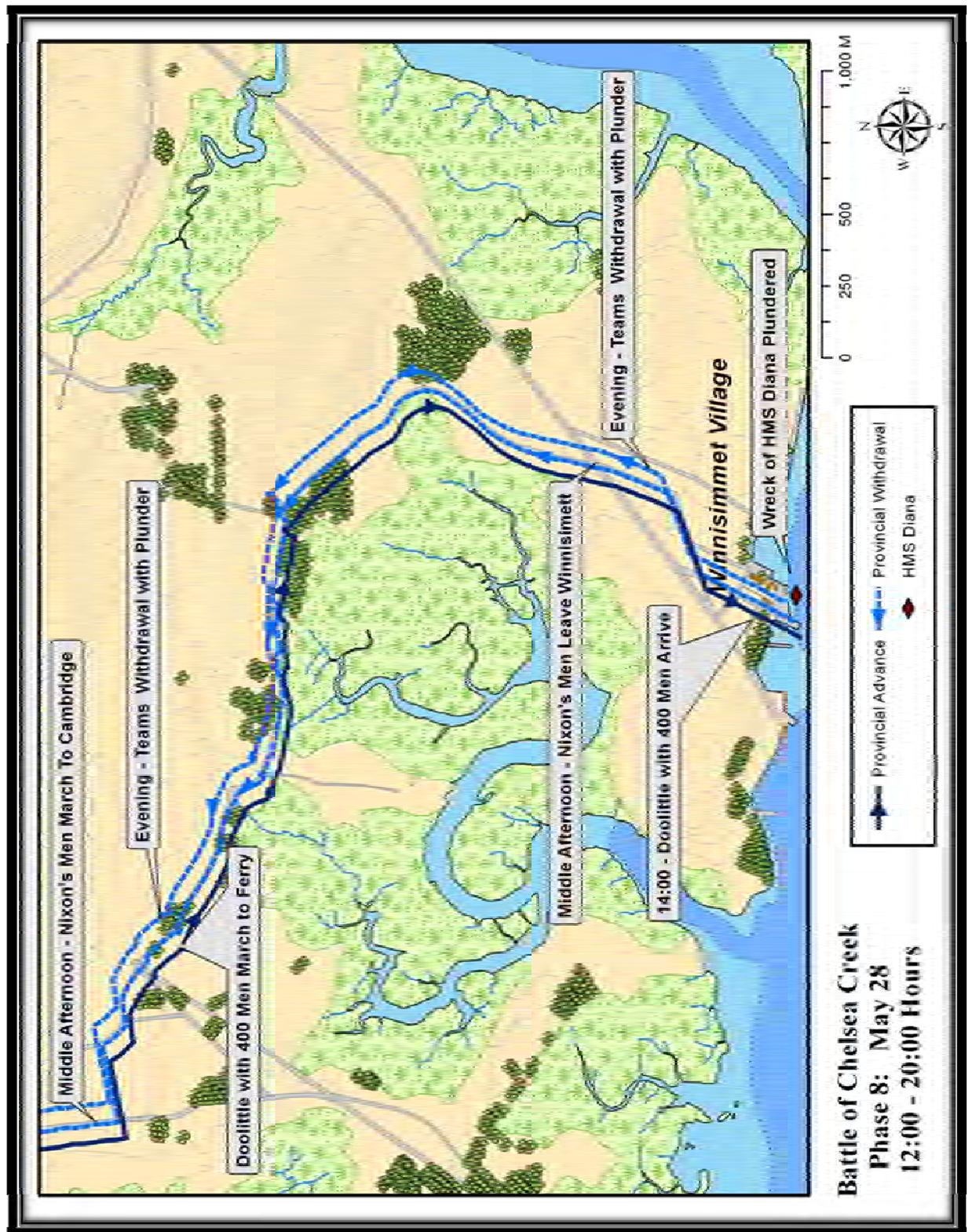


Figure 2.8. Time series map depicting battlefield events between 12:00 – 20:00 hours on May 28, 1775.

2 hours we were dismissed, and the Rebels left to do their business quietly (Barker 1774-1776: 51).” The reason behind this sudden lack of concern can be found in a notation by Vice Admiral Graves. In his journal under May 29th Graves related, “the Rebels burned the only dwelling house on Noddles Island, which being the property of a notorious Rebel then in Arms, was not much regarded (Graves 1775c).”¹¹

The Provincials were apparently not yet finished for they returned the following day, May 30th. Henry Howell Williams stated that “on *Tuesday*, the 30th day of May aforesaid, they entered again on to said island, and then and there proceeded and burnt your memorialist’s mansion house, with all barns, corn-houses, and store houses, stores, provisions, goods, house furniture, wearing apparel, liquors, and utensils of all sorts, to a very considerable amount and value (Williams 1775).”¹² One of the store houses consigned to the flames was the naval cooperage house. Captain Tyringham Howe of the *HMS Glasgow* fixed the losses at “Butts twelve, punches fifteen, Hh’ds ten, Barrells twelve, all full hoopd with 134 Iron hoops & all the Coopers tools (Howe 1775c).” This time Graves saw fit to act. Lieutenant Barker reported that while the naval vessels shelled the Provincials, “a schooner was also sent to fire along the shore (Barker 1774-1776: 53).” Apparently, the marines were also landed on Noddle’s, however, they were sent not to engage the Provincial, but to salvage what left in the store houses (Barker 1774-1776).

The Provincials did not return to Noddle’s Island until June 3rd. On that date, Captain Robinson on board the *Preston* reported that he “fired several times at the rebels, to prevent their entrenching on the island (ADM 51/720; Tentindo and Jones 1978: 131).” This notation is rather intriguing as this is the only source recording this event yet found. It is interesting to contemplate this event as a possible prelude to the Battle of Bunker Hill fought two weeks later. Regardless, what happened was not deemed important enough to warrant much attention other than a few shells.

That last action to occur on Noddle’s Island happened on June 10th. On this occasion, Henry Howell Williams wrote that the Provincials “entered again, and burnt and destroyed the warehouse, the last building on said island (Williams 1775).” This last act of arson provoked a bombardment from the *HMS Somerset*, but otherwise did not elicit much of a reaction (LeCras 1775c). Except for the odd small detail sent to gather up hay, neither the Provincials nor the British expressed much interest in Noddle’s Island for the duration of the Siege of Boston. This seemingly anticlimactic ending does not detract from the importance of the Chelsea Creek campaign. The effort to remove the livestock and fodder from Noddle’s and Hog Islands marked the first combined offensive for the Provincial Army. When Provincial officers did finally decide to act on the Massachusetts Committee of Safety’s recommendations regarding the provisions housed on these islands, they did so in a deliberate, well thought out, and ultimately extremely successful manner.

¹¹ This “a notorious Rebel then in Arms” was Henry Howell Williams, who was acting as a commissary officer in the Provincial Army. Williams stated that the burning of his house occurred on May 30th (Williams 1775). This explanation is a bit odd. Allowing the home of a known rebel to be burned is believable and squares with what is known about Graves’s character. The tremendous loss of valuable livestock and fodder that accompanied the May 29th action was a steep price to pay for a little revenge.

¹² For a complete inventory of Henry Howell Williams’s losses see the Appendix.

3. APPLICATION OF GEOGRAPHICAL INFORMATION TECHNOLOGIES TO THE STUDY OF THE BATTLE OF CHELEA CREEK

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A geographic information system (GIS) integrates state-of-the-art computer software and spatial and temporal data for organizing, analyzing, and depicting geographically referenced information. GIS technology provides a set of scientific tools which enables the visualization and interpretation of data in a variety of ways, dramatically enhancing the user's ability to understand and interpret complicated spatial and temporal relationships (ESRI, 2011). Its use enables us to address a variety of questions and problems by displaying data in a way that is quickly understood and easily shared. Recently, geographic information technologies (GIT) have been successfully employed in the study of important historical events and the recreation of the landscapes over which they occurred (Knowles, 2008).

Historical GIS utilizes GIT to display, store, and analyze historic geographic information and allows for landscape comparisons through time. The use of historical GIS developed through the integration of the fields of historical geography and geographic information science (Knowles, 2005). Its implementation has dramatically improved historical research, education, and conservation activities. It is a powerful scientific tool to investigate and create geospatial and temporal data and produce highly accurate digital and paper maps that depict past landscapes and topography. It also allows for the integration of multiple spatial and temporal datasets, including historical geographic and bibliographic information. Historical GIS methodologies provide the perfect tool to investigate the historical landscape of Boston Harbor and the Battle of Chelsea Creek.

This investigation will employ GIS and an ArcGIS Citation Data Model (CDM) in order to conduct a geospatial assessment of the location, extent, and preservation potential of the Chelsea Creek Battlefield and its associated cultural and archeological resources. A CDM provides researchers with a unique opportunity to integrate bibliographic and geospatial data within a GIS in order to build a scientifically defendable GIS. A CDM is a model and methodology that organizes and relates the historical sources to the points, lines, and polygons that make up GIS data (Frye, 2008). Battlefield maps are produced within the GIS through the integration of multiple data sources including, historical bibliographic and geographic information and high resolution orthophotographs and light detection and ranging (LIDAR) data. The study has recreated the 1775 landscape and topography of Boston Harbor in order to georeference the defining features of the battle and carry out a military terrain analysis utilizing KOCO system categories.

The dataset produced through the building of the GIS and CDM provides an accurate high resolution dataset of the temporal and spatial representation of the events and landscape features associated with the Battle of Chelsea Creek. This data has numerous applications for future archeological and environmental research. The investigation will also aid in the development of long-range management strategies for the Chelsea Creek Battlefield and facilitate the assessment of threats posed by anthropogenic activities and environmental change.

As stated in the Introduction, this study has a number of GIS related goals:

1. Recreate the historical (1775) landscape and topography associated with the Battle of Chelsea Creek.
2. Integrate historical records, bibliographic information, and spatial data within a CDM in order to map, inventory, and reference the defining features of the battle.
3. Conduct a military terrain analysis in order to delineate the “battlefield” and identify defining features using the American Battlefield Protection Program (ABPP) KOCOAs standards.
4. Identify and map areas within the battlefield having preservation potential which may provide future archeological and conservation opportunities.

3.1 Study Site Setting

Boston and the surrounding vicinity have experienced major shoreline and harbor modifications since 1775. There are few coastal cities in the world that rival the dramatic anthropogenic landscape modifications witnessed in Boston. Tideland areas have been filled to make room for development and industrialization, while other areas, including Chelsea Creek and Boston’s Inner Harbor, have been heavily dredged to facilitate marine shipping and commerce. The rectangular areas delineated as the study site encompass an area of 50 square kilometers, and encompass parts of Chelsea, East Boston, Boston, Somerville, Cambridge, Revere, Winthrop and Medford (Figure 3.1). Due to the nature of the battle, identifying an actual “battlefield” was difficult. Therefore, all areas containing the defining features of the battle were included within the delineated study site. However, due to the scope of the project and spatial data limitations, some areas from which Provincial forces originated from, or traversed, were not included in their entirety. These included the towns of Cambridge, Malden, and Medford.

In 1775, Boston’s Inner Harbor was a large and ecologically productive estuarine system with numerous saltmarshes and tidal creeks which fed into the larger tributaries of Chelsea Creek and the Mystic River. Though the major tributaries are still in existence, many of the marshes and smaller tributaries have long since been filled as these communities continued to expand. Today, much of the waterfront within the study site has been heavily developed and industrialized. One of the most dramatic examples of the anthropogenic and environmental changes within the Harbor is the expansive Logan International Airport, which was built upon the tidelands which once surrounded Hog and Noddles Islands (Figure 3.2). Both Islands have long since become a heavily urbanized peninsula, currently known as Orient Heights and East Boston respectively. The wide scale anthropogenic modifications that have occurred within the study site will undoubtedly have major implications to the preservation potential of cultural and archeological resources associated with the battle.

3.2 Previous GIS-Based Historical Research

Over the past decade, numerous investigations have employed GIS for historic landscape reconstruction and military terrain analysis (Knowles, 2005). Historical GIS was successfully employed in order reconstruct and analyze the landscape upon which the American Civil War era Battle of Gettysburg occurred. (Knowles, 2008). This investigation provided valuable insights

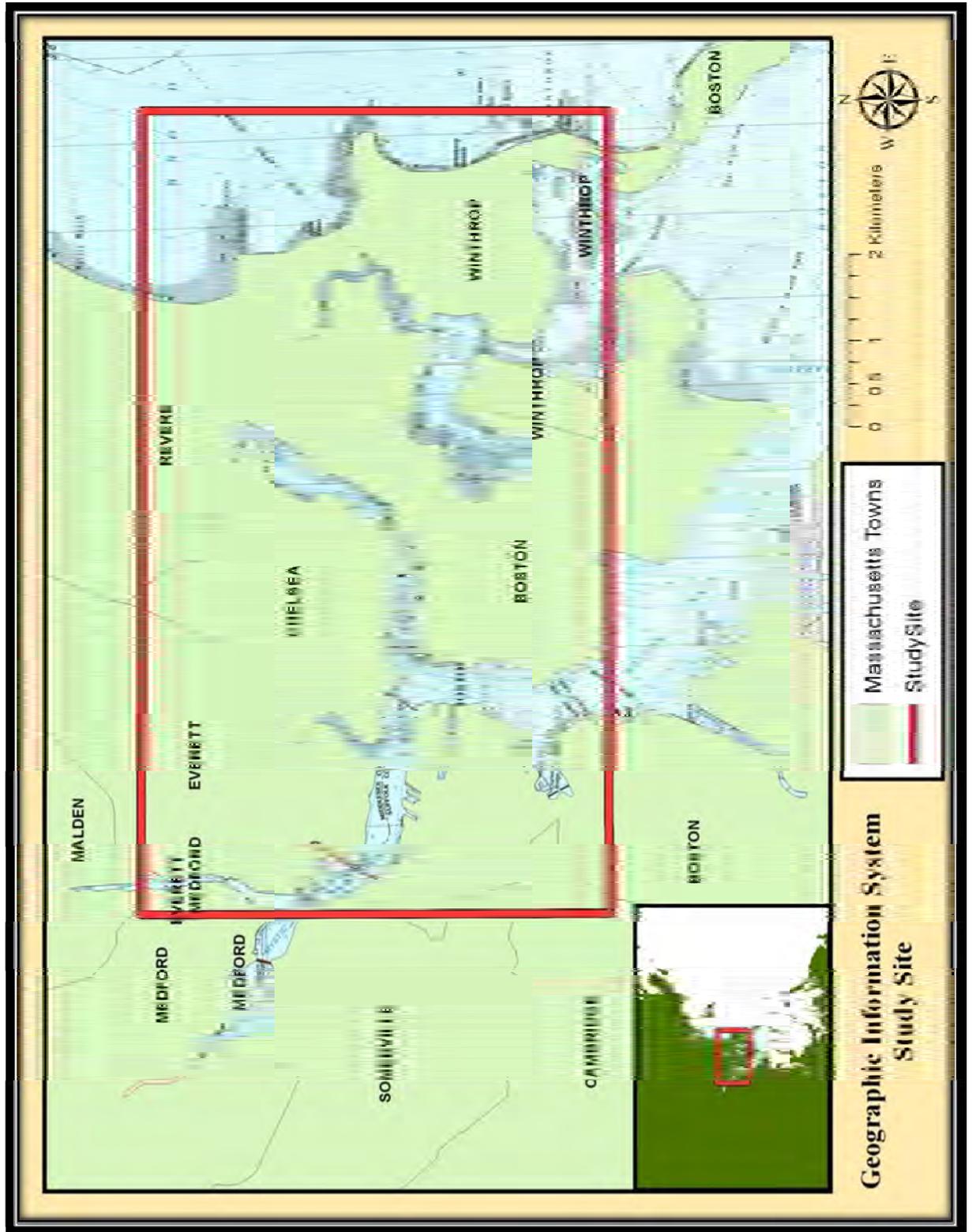


Figure 3.1. Map depicting GIS study site. The historical landscape was recreated in the area shown within the red rectangle.



Figure 3.2. Heavily modified landscape in the area of Logan International Airport shown within the green box.

into the influence of the military landscape on the battles outcome. Frye (2008) developed the ArcGIS CDM in order to spatially and temporally recreate the 1775 landscape surrounding the American Revolution Battle of Bunker Hill. The same CDM methodologies were later utilized to depict and analyze the landscape surrounding the Battles of Saratoga and Benedict's Arnold's expedition through Maine and Quebec (Frye, 2010).

The rapid development of GIS for creating and representing virtual worlds of the past has dramatically improved our ability to capture and inventory salient aspects of the historical landscape and to effectively communicate them to a broad array of audiences (Sheppard 1999). An investigation was conducted in West Oxfordshire, England which utilized ArcView 3D Analyst to recreate and visualize the Royal Hunting Forest of Wychwood. In the study, contemporary aerial photography, a digital elevation model (DEM), and historical maps were integrated within a GIS to reconstruct landscape change and deliver 3D visualizations to a geographically diverse audience (McLure and Griffiths, 2002).

Giese et al. (2009) undertook geo-referencing 19th Century United States Navy Coast Survey (Coast Survey) maps within a GIS in order to carry out a high resolution analysis of coastal landscape change in Massachusetts along the Cape Cod barrier beaches of Chatham and Nauset. This investigation mapped the location of relict tidal inlets for the purposes of estimating future shoreline configuration and conditions. Mague (2011) was successful at recovering 19th century Coast Survey benchmarks in order to reduce vertical datum uncertainty for the purposes of investigating long-term coastal change on Cape Cod. In another investigation Mague (2009) utilized an abundance of cartographic sources to delineate Boston's pre-colonial shoreline. The pre-colonial shoreline was meticulously identified and mapped through the development of a base level shoreline derived from the mid-19th century Coast Survey maps.

A major contribution to historical landscape reconstruction in Massachusetts was carried out by the Boston Survey Consultants, Inc. (BSC) working under the Massachusetts Office of Coastal Zone Management (CZM) Historic Mapping Project (Mapping Project) (BSC, 2007). A rigorous research project was established in order to identify historic cartographic sources that could be used to accurately identify the most landward shoreline within Massachusetts. A cartobibliography of over 2,600 plans was developed with numerous historical maps being geo-referenced within a GIS (BSC, 2007). The entire Mapping Project database was provided to this investigation by CZM.

3.3 Data Sources and Data Integration

The ability to integrate and analyze multiple data sources at varying temporal and spatial scales within a GIS was an integral part of this investigation. ArcGIS version 10, designed by ESRI Inc. was used for all data integration and analysis. Leica Geosystems ERDAS Imagine Version 10, a remote sensing and photogrammetric processing software package, was employed for the georeferencing of non-registered historical maps. All data processing and GIS tasks were carried out on a Dell Optiplex GX 620 Intel(R) Pentium 4, equipped with a 3.20 GHz CPU and 4.00 GB of RAM. The system was operated and supported by Microsoft Windows 7, Professional Version 2007.

Multiple data sources were obtained through the Massachusetts Offices of Geographic and Environmental Information (MassGIS) including georeferenced historical maps,

orthophotographs, and high resolution light detection and ranging (LIDAR) data (MassGIS, 2009). Image data obtained from MassGIS for use in this study was registered to the NAD1983 datum, Massachusetts State Plane Mainland Zone coordinate system. All other data sources used in this project were brought into this same coordinate system for efficient processing and analysis within the GIS.

The single most important data source obtained for this investigation came from the Mapping Project carried out by BSC (BSC, 2007). The foundation for the dataset was obtained through the original Topographic Sheets (T-Sheets) and Hydrographic Sheets (H-Sheets) obtained from the Coast Surveys carried out in the early to mid 19th century (BSC, 2007). These were deemed to be the most reliable and reproducible sources for historical shoreline positions and landscape features (S.T. Mague, personal communication). The complete dataset for the Chapter 91 mapping project was provided by CZM. It was determined that the Coast Survey maps dating from 1817 and 1847 would be used as the baseline for recreation of the historical landscape.

Another important data source utilized for the investigation was obtained through the Norman B. Leventhal Map Center, at the Boston Public Library (BPL). The Map Center, through its extensive cartographic holdings stretching back to the 15th Century, collects and preserves maps and atlases and promotes scientific research and innovative educational opportunities (BPL, 2010). The collection houses thousands of historical maps which have been digitized and can easily be searched, accessed, and downloaded through their website (BPL, 2010). Several maps obtained through the collection dated from the Colonial Boston era. Although these maps are not registered within a GIS, they nonetheless were useful in identifying landscape changes occurring in the 37 years between 1775 and the first 1817 Coast Survey maps. They were also important in identifying place names and cultural locations.

3.4 Citation Data Model

An ArcGIS CDM provides the user with the ability to integrate historical bibliographic sources with geospatial datasets (Frye, 2008). The template for the CDM utilized in this project was obtained through ESRI's Mapping Center (Frye, 2010). The implementation of a CDM allows for the creation of a data base schema which is physically represented in a geodatabase. A geodatabase is a proprietary database schema used to organize geospatial data within ArcGIS (Frye, 2008). This enables for the production of a variety of paper and digital maps and the ability to carry out complicated geospatial analysis of battle events. The CDM also provides accountability in mapping comparable to other scientific research where all information must be cited in order to be considered credible. Its employment provides for a transparent geospatial dataset supported by historical bibliographic sources which will enable the research community to utilize and authenticate its accuracy (Frye, 2008).

The Frye (2008) methodology and accompanying dataset could not have been better suited for this project as it depicted the Battle of Bunker Hill, which was temporally and spatially related to the study of the Battle of Chelsea Creek. The template and dataset obtained through Frye (2010), was employed to build a CDM for the Battle of Chelsea Creek. The CDM relates sources within a table to a feature class within a geodatabase. Each source is entered into a row within the table and assigned a unique identifier which serves as the foreign key in a geodatabase relationship

classes (Frye, 2008). Features on the map (e.g. buildings, key terrain) are assigned the appropriate Source Id (SrcID) which is entered into the “SrcID” field within the attribute table and used as the primary key in the relationship class (Figure 3.3). The geodatabase relationship classes are two-way so that each source can be queried to show what features were derived from them and likewise each feature can be queried to see which source it was derived from. In addition to the primary source, verifying sources (VSrc1, VSrc2) and conflicting sources (CSrc) are included in the features attribute table but not currently related to the CDM.

3.5 Base Map Creation

One of the most important aspects for developing the digital representation of the 1775 landscape is the creation of the base map (Figure 3.4). The base map serves as the foundation for the entire GIS and it is crucial for accuracy of the KOCO analysis. In order to develop a high resolution base map built on reliable positional information, the Coast Survey maps were used as the reference layer for major landscape features such as the shorelines and saltmarshes.

Within the BSC (2007) dataset two series of Coast Survey maps, dating from 1817 and 1847, were used to delineate the historical shoreline and landscape features. The series of 1817 Coast Survey maps by A.S. Wadsworth included the actual hydrographic field sheets from his work (H-1960 and H-1961). The H-1960 dataset was registered by BSC and provided by CZM (Figure 3.5). The unregistered H-1961 dataset was obtained through National Ocean and Atmospheric Administration’s National Geophysical Data Center (NOAA-NGDC, 2010). After the H-1961 map was registered utilizing ERDAS Imagine, it could be integrated with the other data in the creation of the historical shoreline (Figure 3.6). The 1817 maps were not as accurate as the 1847 series and served as the secondary source for the base map. They were nonetheless important as they represented the earliest available known survey based maps of the study area (Figure 3.7).

The series of 1847 Coast Survey maps by A.D. Bach were utilized as the primary source for the creation of the base map (Figure 3.8). The absence of any significant filling or change to the coastal areas prior to 1847, deemed the Coast Survey maps most accurate data source for base level information (S.T. Mague, personal communication). The accuracies of the 1847 survey are quantifiable and verifiable, far exceeding National Map Accuracy Standards at the compilation scale of 1:10,000 and probably closer to 1:5,000 (S.T. Mague, personal communication). The error associated with the registered survey maps was statistically determined by BSC (2007) to be less than three meters. This enabled for the accurate delineation and depiction of the 1775 landscape and heightened the probability of identifying the location of archeological resources associated with the battle.

The process of delineating and digitizing the landscape features for the base map was carried out using ArcGIS software components, including ArcMap, ArcToolbox, and ArcCatalog. ArcCatalog was used to create new point, polyline, and polygon shapefiles registered to the same coordinate system as the MassGIS datasets. The most important aspect of creating the base map is the accurate delineation of the shoreline and the recreation of the historical landscape. The most landward shoreline shown on 1847 Coast Survey maps is associated with the High Water

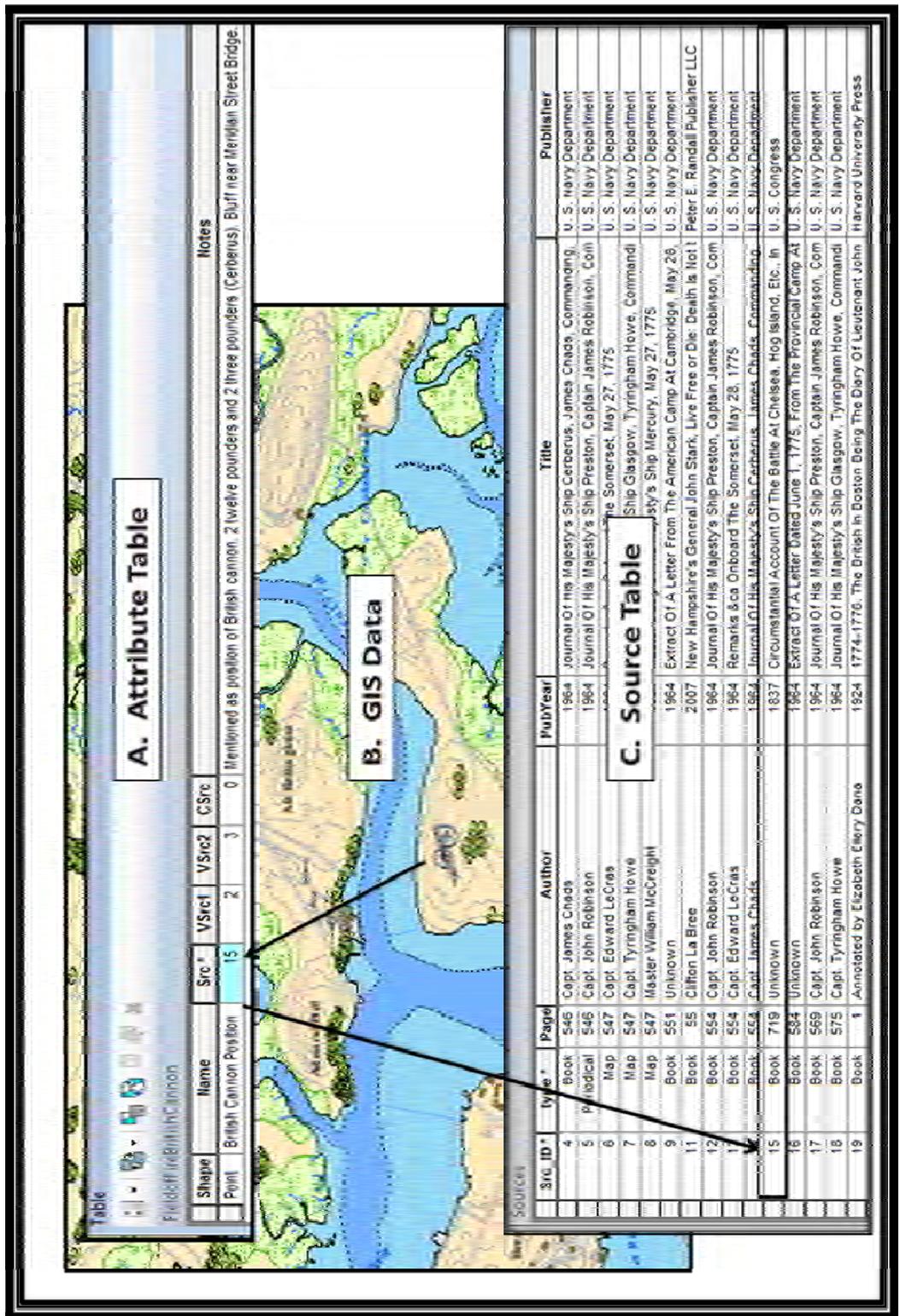


Figure 3.3. Integration of data and historical sources within the Citation Data Model. The attribute table (A) of the British Cannon feature (B) is shown with the source (15) from which it was derived. The citation for historical source 15 is shown in the Source table (C).



Figure 3.4. Historical period base map. This data served as the cornerstone and backdrop for the KOCOA and Time Series analysis. The data also was important when comparing historical and current landscapes.

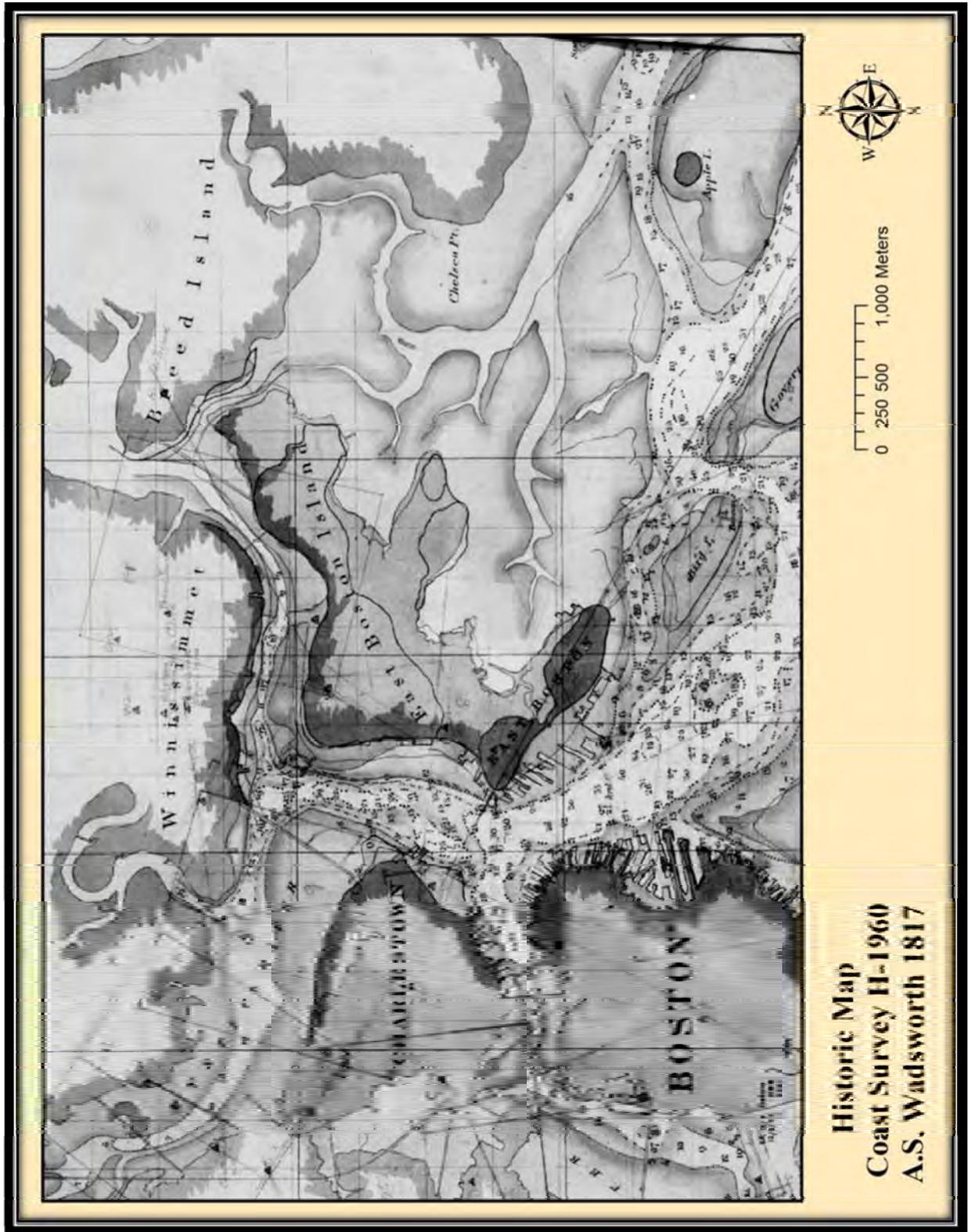


Figure 3.5. Historical geo-referenced 1817 Coast Survey Map H-1960. This map was used as the secondary source for the digitization of the historic shoreline.

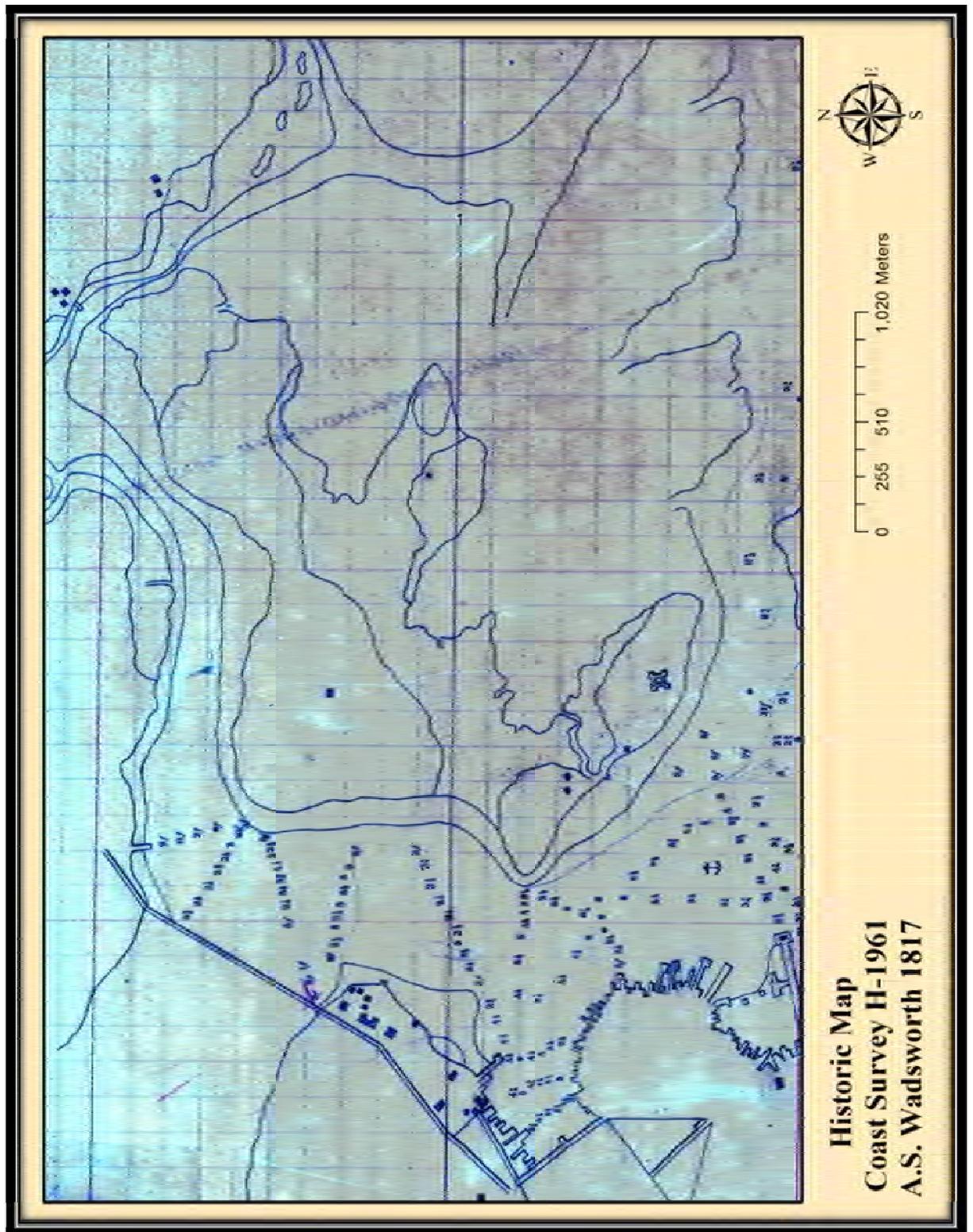


Figure 3.6. Historical geo-referenced 1817 Coast Survey Map H-1961.

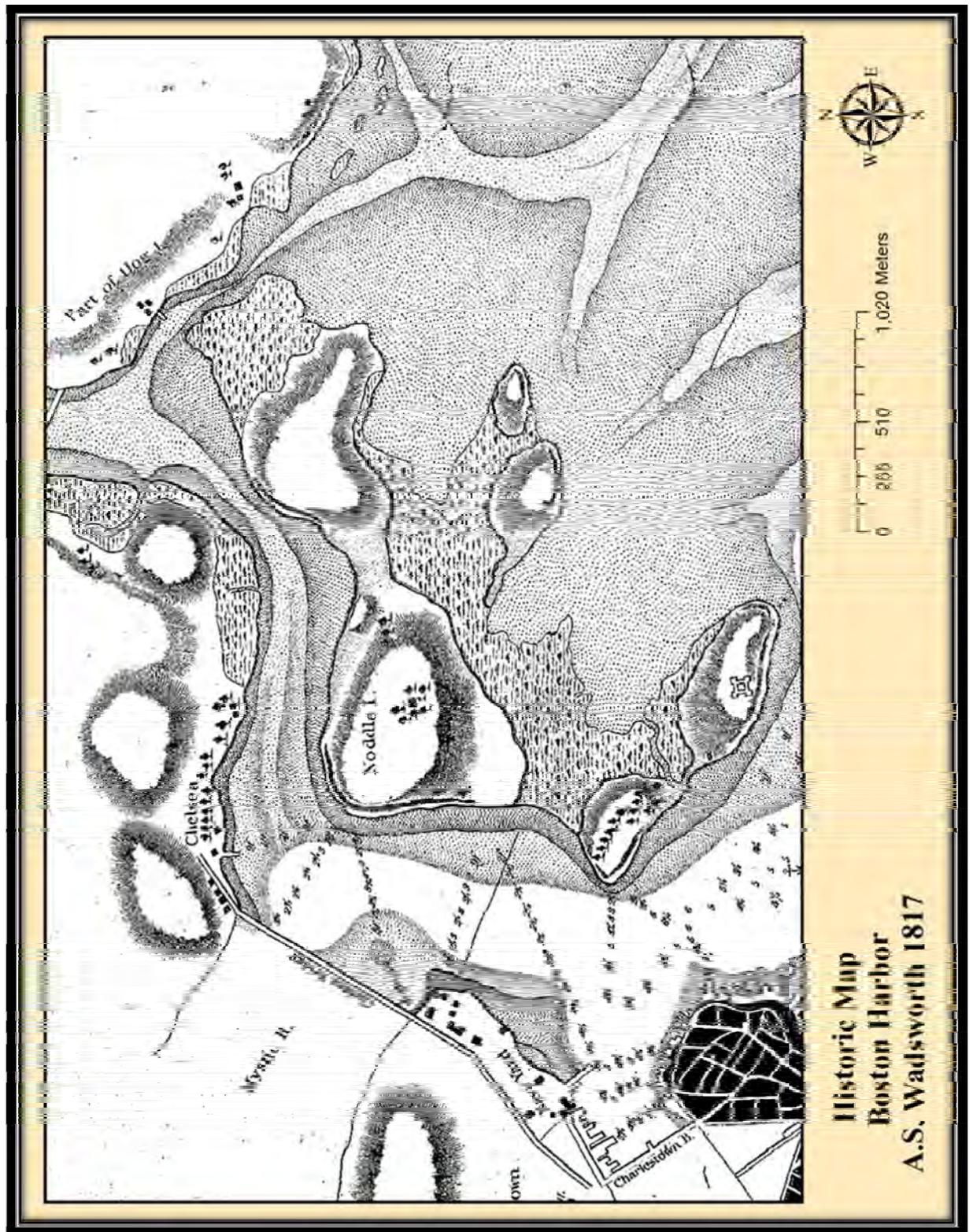


Figure 3.7. Historical geo-referenced 1817 Coast Survey Map, “Boston Harbor”. This series of maps was used as a secondary source in the creation in landscape features.

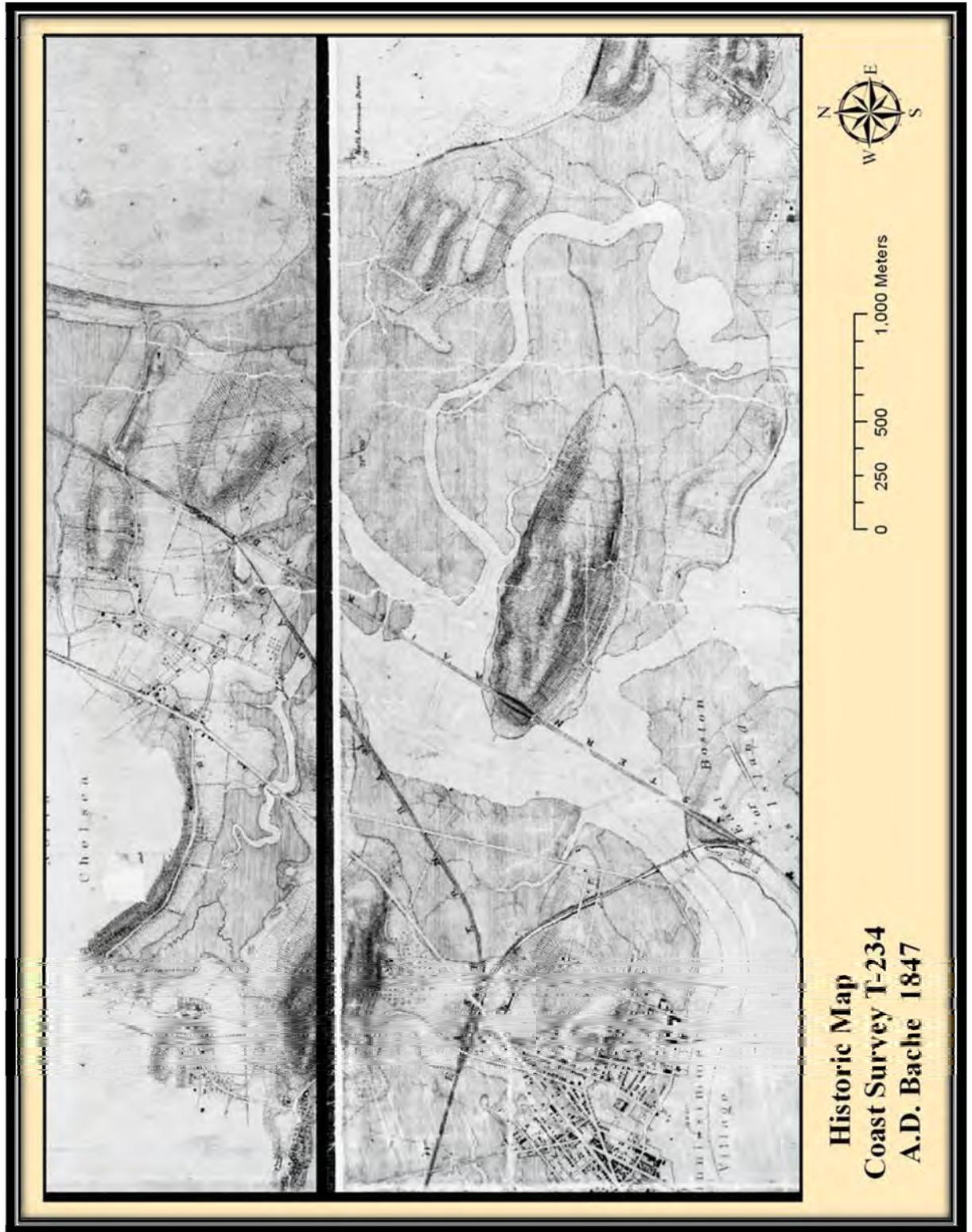


Figure 3.8. Historic geo-referenced 1847 Coast Survey map used as the primary source in the creation in landscape features.

Line (HWL) and was digitized to represent the 1775 shoreline (Figure 3.9). In areas that the 1847 shoreline was not representative of the 1775 shoreline, the 1817 Coast Survey maps were used as the secondary source. The resulting polyline shapefile provided the starting point for the creation of all other data (Figure 3.10).

New shapefiles were created to represent the individual features shown on the Coast Survey maps and then imported into the geodatabase and further edited (Figure 3.11). All features were annotated using standard ArcGIS labeling tools. The source map from which each feature was digitized from was cited within the attribute table and related to the Source table within the CDM. Other maps, including the 1817 Coast Survey maps and the unregistered maps were used to verify the existence of particular landscape features existing in 1775. While the physical landscape had changed very little between 1775 and 1847, there was extensive development with respect to buildings, roads and wharfs. An example of this are the roads depicted on the 1847 map which represent an increase over those that actually existed in 1775. As a result, we digitized roads and other landscape features from the 1847 maps that could also be identified on the earlier maps dating from the 18th Century.

3.6 Digital Elevation Model (DEM)

In order to carry out viewshed analysis and accurately depict contours on the base map, it was necessary to create a digital elevation model (DEM) representing the 1775 topography. The DEM was produced through the integration of high resolution light detection and ranging (LIDAR) data, which provided coverage of the uplands, and constant value raster layers representing the intertidal and marine areas.

LIDAR is one of the most promising technological developments in topographical analysis. The increasing availability of LIDAR data over the past decade is revolutionizing the geospatial analysis of coastal features, and as its availability and temporal range increases, it will undoubtedly provide the foundation for future studies (Maio et al., 2011). LIDAR data are obtained from an aircraft- or vehicle mounted instrument that provides the capability of producing high resolution digital elevation models (DEMs). With a vertical accuracy of less than 10 centimeters, LIDAR derived DEMs are unrivaled in their accuracy and resolution for topographical analysis. We, therefore, integrated this data into the creation of the historical DEM.

An existing 2002 LIDAR derived DEM covering Boston Harbor was obtained through MassGIS (MassGIS, 2003). The use of a modern dataset to depict the historical landscape was justified as upland areas have not experienced anthropogenic modifications to the degree which would affect our ability to accurately produce contours and carry out viewshed analysis. The existing “Upland” polygon shapefile digitized from the 1847 Coast Survey maps was used to clip the

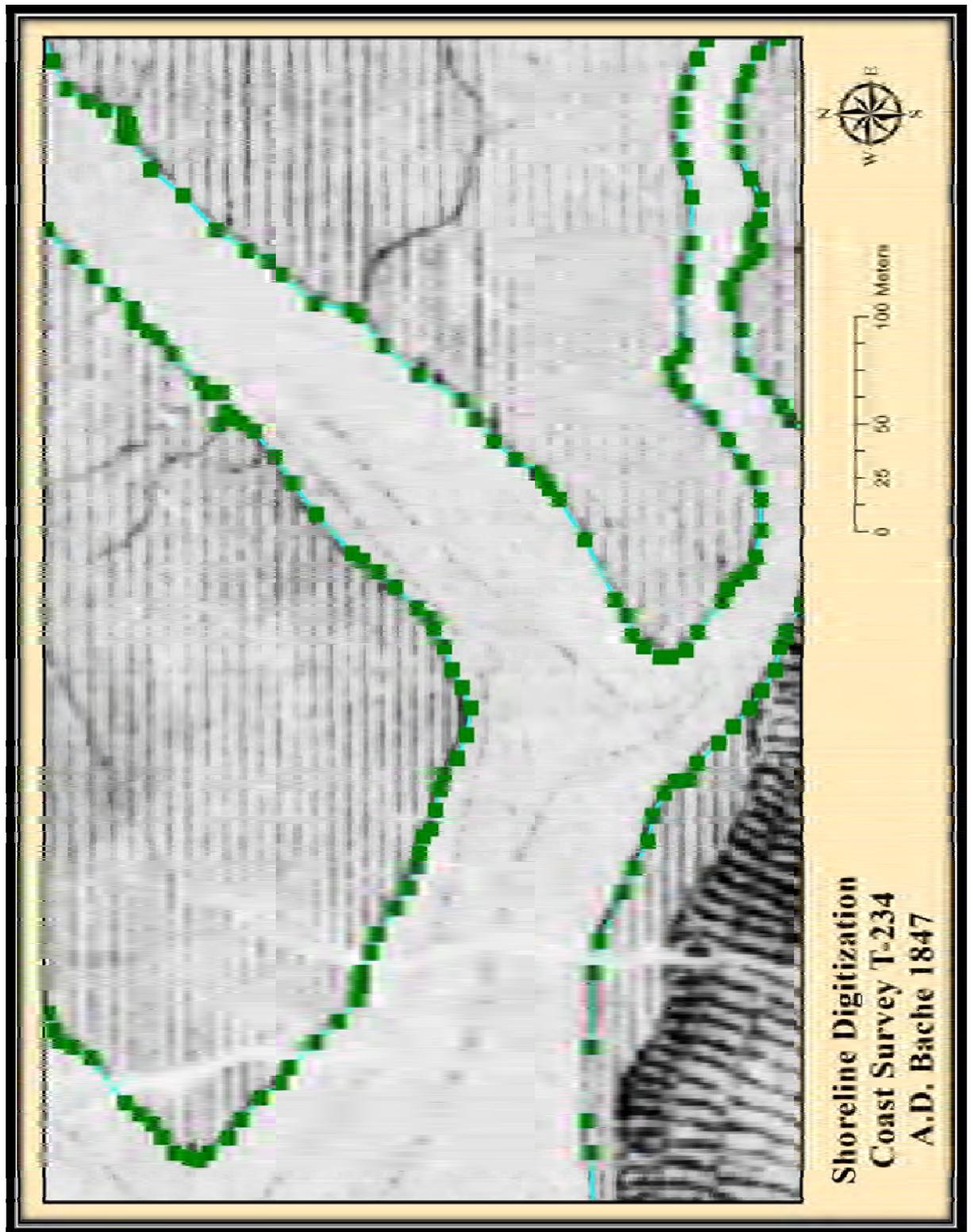


Figure 3.9. Example of methods used to digitize the historic shoreline using the 1847 Coast Survey map as the source data.

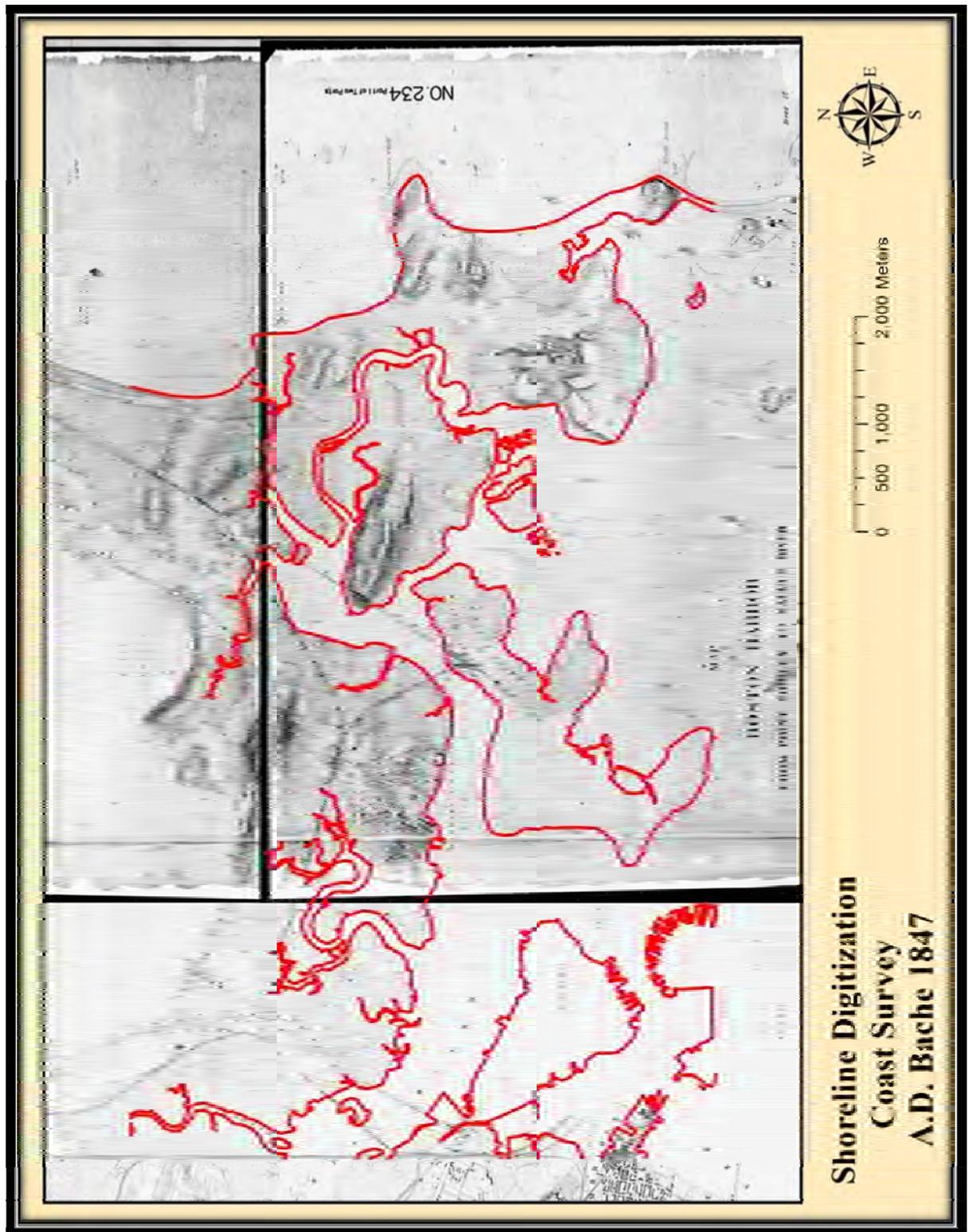


Figure 3.10. Historic 1775 shoreline shown in red provided the starting point for the creation of all other landscape features.

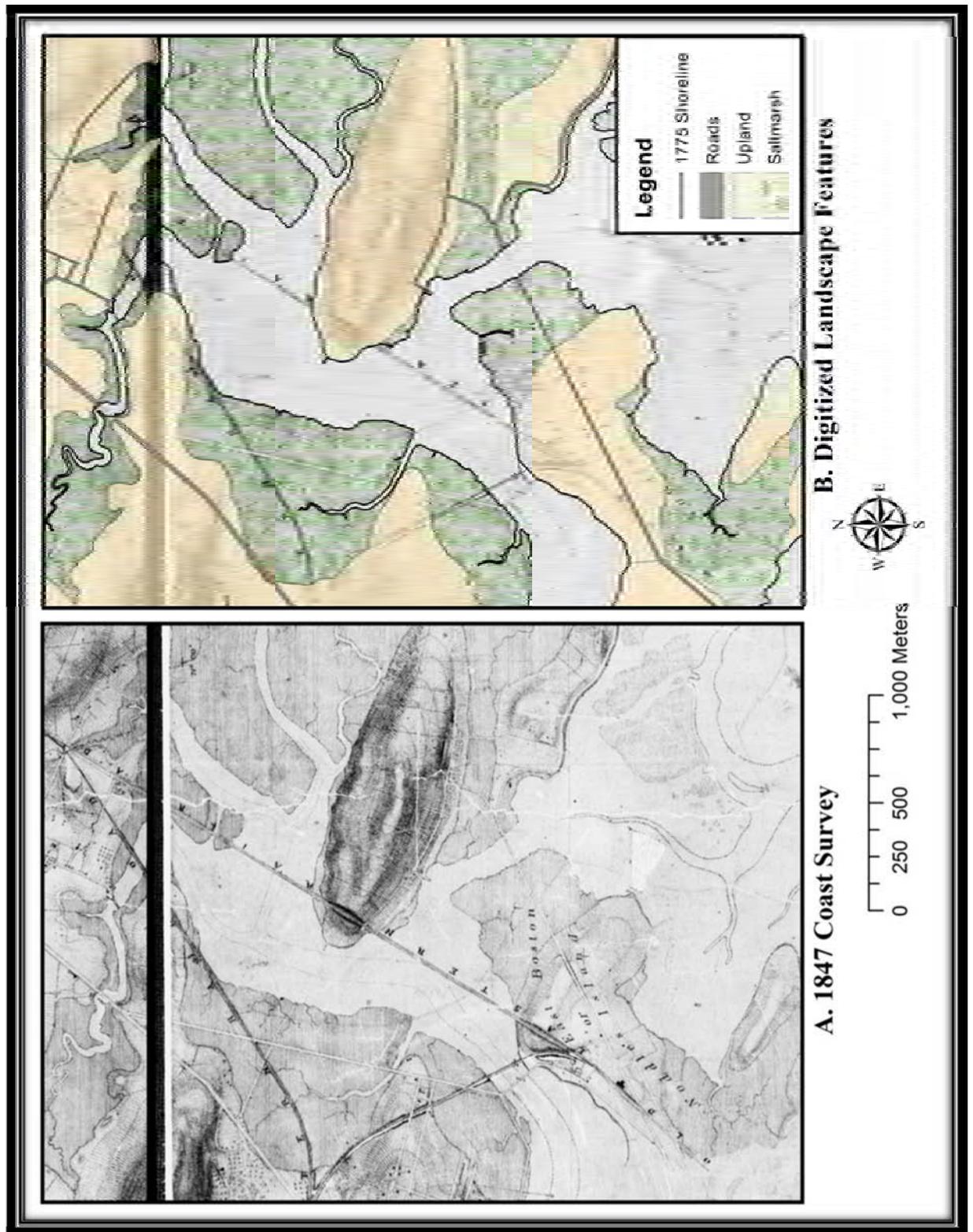


Figure 3.11. Example of feature creation using 1847 Coast Survey map (A) as source. Landscape features shown digitized on map (B) include Roads, Upland, Saltmarsh, and the shoreline.

2002 LIDAR data within ArcToolbox. This resulting DEM represented only upland areas of the study site (Figure 3.12).

The extensive filling that occurred within the intertidal areas did not allow for the use of LIDAR for these areas. It was, therefore, necessary to create a single value DEM to represent the saltmarshes. An elevation of 1.71 meters was obtained from the averaged elevation values of the cells covering the Belle Isle Saltmarsh Reserve, one of the few locations within the study area not heavily developed. The change in sea-level at 2.8 mm per year (Donnelly, 2006) between 1775 and 2002 (0.63 meters) was then subtracted from this value (1.71 meters) resulting in a saltmarsh elevation value of 1.08 meters. A raster layer was then created using the “Saltmarshes” polygon shapefile and all cells were assigned the 1.08 value.

Similar methods were used to create a raster layer for the marine areas within the study site setting its value to zero. This represented the approximate elevation of the HWL minus the change in sea-level (0.63 meters) on the 2002 LIDAR DEM. The three separate DEM’s (Upland, Saltmarshes, and Waterbodies) were then mosaiced together within the Spatial Analysis extension and used to represent the terrain of the study site (Figure 3.13). The DEM was then used as the input to create the three meter contours and carry out viewshed analysis.

3.7 GIS and KOCOA Analysis

A military terrain analysis was carried out in order to identify and map the defining features of the battle utilizing KOCOA system categories. Features identified as fitting into the KOCOA schema were obtained through the historical sources and created utilizing standard ArcGIS vector data including points, lines, and polygons. A geodatabase was created to organize and integrate the data within the CDM. A major challenge for the KOCOA analysis was the accurate georeferencing of battlefield components. Historical records indicate that the actual battle did not take place in one location, but rather included a number of running skirmishes which took place at varied locations. Due to the subjective nature of the location data, and the dramatic landscape modifications that have occurred, it was difficult to accurately identify specific battlefield components on today’s landscape. A detailed discussion of the KOCOA analysis is included below in Section 4.

3.8 GIS and Time Series Maps

Time series maps, also known as sequential maps, were produced in order to display the complicated actions which took place during the Battle of Chelsea Creek. The time series maps enabled for the accurate representation of the varying spatial and temporal actions which took place between May 27 and May 30th (see Section 2). When possible, battle events were depicted utilizing data created for the KOCOA analysis. The time series maps were produced for the purposes of producing digital and paper maps in order to provide a visual representation of the historical account. The sources for these features was entered into their attribute tables but were not related to the CDM.

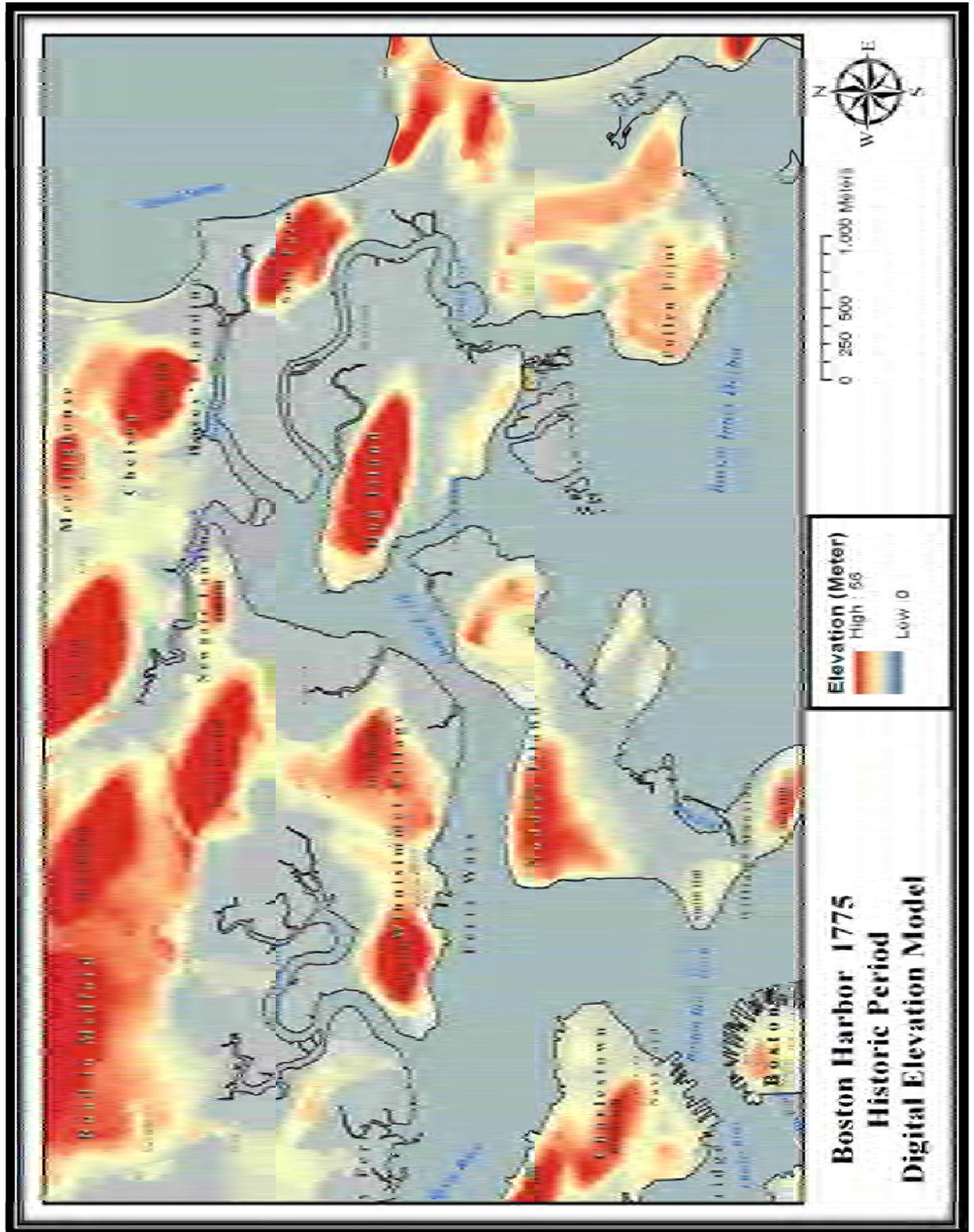


Figure 3.13. Historical digital elevation model utilized for viewshed analysis and the creation of base map contours

3.9 Summary

Recreating landscape features that existed over 225 years ago and integrating them with historical source documents was only possible through the utilization of geographic information technologies. These technologies were successfully applied to carry out a detailed temporal and spatial analysis of the Battle of Chelsea Creek. The ability to integrate historical bibliographic and geographic information with high resolution geospatial data within the GIS provided the ability to analyze, map, and visualize a complicated set of events taking place in time and space. The ability to visualize these data in user-friendly accessible media enabled for a much richer and fuller understanding of this significant historical event.

The significance of the earlier work carried out by BSC (2007) and Frye (2008) cannot be understated and greatly enhanced the quality and accuracy of the Battle of Chelsea Creek GIS. The meticulously registered Coast Survey maps provided by CZM saved hundreds of hours in geoprocessing; we could never have achieved accuracy obtained by BSC (2007). This enabled us to spend much more time creating and depicting landscape features and building the CDM. The availability of the Frye (2010) ArcGIS CDM template provided through ESRI's Mapping Center was also a major contribution to the project. The CDM template and methodology provided the foundation for the Battle of Chelsea Creek model and enabled its success.

One of the more difficult aspects of carrying out the KOCOAs analysis was attempting to integrate historical accounts with precise locations on the high resolution base map. The historical accounts of the battle were often from non-locals not familiar with the local landscape. The location information obtained from these accounts was, therefore, far from precise, providing a challenge in identifying them on a map. All defining features identified on the KOCOAs maps are therefore associated with an undeterminable degree of error. Despite the fact that we can say that the shoreline created for the project was within three meters of the "true" shoreline at the time of the battle, the defining features cannot be located with the same precision.

The most challenging aspect of carrying out the GIS analysis of the Battle of Chelsea Creek was defining the scope of the project and focusing on achievable goals. Creating the GIS and CDM were very labor intensive. Most data was created from scratch, resulting in hundreds of hours of computer time. Entering historical accounts and bibliographic information into each feature's attribute table and relating these to the Source table was also very labor intensive.

The results of the geospatial assessment of the area associated with the Battle of Chelsea Creek have provided a baseline to guide future research. This information will aid in the assessment of present and future threats posed by further landscape modifications. The landscape and topographical features represented in the dataset have wider applicability to numerous environmental studies and to research the implications of sea-level rise and anthropogenic modifications on coastal lands. Through the creation of the high resolution temporal and spatial data and CDM, there is also great potential for future historical and archeological research. Finally, this dataset can also provide for numerous creative educational opportunities taking advantage of cutting edge geographic information technologies to teach about history and environmental change.

4. KOCOA Analysis: The Battle of Chelsea Creek May 27- 28, 1775

The National Park Service (NPS) utilizes a standard method of military terrain analysis, called the KOCOA approach, to define the limits of historical battlefields. The KOCOA approach correlates significant terrain features recorded in historical accounts of the battle with terrain features that can be identified on the modern landscape in order to establish the boundaries of the battlefield. Significant terrain features may be natural or cultural in origin. These terrain features are then organized and cataloged under the appropriate KOCOA components. KOCOA is an acronym that stands for: **K**ey or Decisive Terrain; **O**bservation and Fields of Fire; **C**over and Concealment; **O**bstacles; **A**venues of Advance and Withdrawal. These components are defined in Table 1 below.

The application of KOCOA to the Battle of Chelsea Creek is not done without difficulty. There is a definite lack of primary source material from battle participants among the Provincial forces. This may be attributed to a lack of organization prior to the arrival of General George Washington and the creation of the Continental Army in July 1775. It may also be true that the participants at Chelsea Creek were simply overtaken by the dramatic events at the Battle of Bunker Hill on June 17, 1775, an event in which they also played a part. It must be remembered that especially at this early date Provincial forces were committing treason in the eyes of British law by actively engaging Regular Army and Navy units. The punishments for committing treason were among the most horrible in the history of jurisprudence including, among others, flogging, hanging, being drawn and quartered, and disembowelment. Participants in the Battle of Chelsea Creek may have been reluctant to commit their experiences to paper under the threat of such consequences, honorable reconciliation and not independence being the objective at that time. The few existing accounts were written by people who were not native to the area and, as a consequence, the landmarks they describe are not named. The landscape and shoreline along portions of Chelsea Creek is also greatly altered from its 1775 configuration. Still, a great deal of information, much of it new, has come to light through this analysis and several areas of potential archeological interest have been identified.

To facilitate interpretation of the Battle of Chelsea Creek, the map depictions in the following figures utilize the reconstructed 1775 historic landscape for each of the various KOCOA components. The locations of the opposing forces are depicted using the colors: blue for Provincial (American) forces and red for British (naval, marine, army) forces. The level and detail of historical accounts does not allow us to further identify specific units (e.g., Massachusetts or New Hampshire militias).

KOCOA Component	Definition	Example
Key or Decisive Terrain	Any locality or area, the seizure of which conveys a military advantage to a combatant.	High ground, open fields.
Observation and Fields of Fire	The ability to see over a particular area and acquire targets.	High ground, open fields.
Cover and Concealment	Cover is protection from the effects of fire. Concealment is protection from observation.	High ground, buildings, vegetation, fortifications, ditches, ravines, gullies, embankments.
Obstacles	An obstacle is any natural or manmade obstruction that disrupts movement.	Bodies of water, marshes, ditches, ravines, walls, dense vegetation.
Avenues of Advance/ Withdrawal	The route a force can use to reach its objective or withdraw from an area.	Roads, railroads, paths, dry creek beds.

Table 1: KOCOA Terrain Analysis Definitions (U.S. Army FM 5-33; 6-0; 34-130)

4.1 Key Terrain

The broken topography of the Chelsea Creek Battlefield accentuated the importance of the high ground in this series of engagements. Mill Hill and Noddle’s Island Hill (West Head) were key terrain features that provided observation points with exceptional lines of sight over much of the battlefield. Firing positions at these elevations commanded important sections of the navigable channel of Chelsea Creek. These elevations also sat astride important roads which the contending forces used to approach and withdraw from the battlefield. Forces moving along these roads were able to use these heights to conceal their movements and provide cover during the battle. Key terrain occupied or traversed by Provincial (American) forces is marked in blue. Those key terrain features utilized by the British are marked in red. (Figure 4.1)

Mill Hill is an especially useful example of the role these key terrain features played in the Battle of Chelsea Creek. While primary source material relative to the battle is sparse and few locations are expressly named, Mill Hill is apparently the knoll described by James Stevens in his account of the battle. Stevens related that his party arrived “within a quarter of a mile of the fery & then halted & our ofisers went to louk out to place the canon they went round by the water while thay come in sight of the sconer when as son as the regerlers saw our men thay fired on them then the firing Begun on boath sides & fired very worm there come a man & ordered us over a nol rit into the mouths of the canon we got on the top of the nol & the grap shot & canon bauls com so thik that we retretd back to the rode & then marcht down to the fery (Stevens 1775-1776: 45-46).” The slight rise of land opposite Mill Hill adjacent to the tide mill provided a similar service and is likely the “Chelsea Neck” mentioned in the June 8, 1775 *New York Journal* article entitled “A Circumstantial Account Of The Late Battle At Chelsea, Hog Island, &c (Anon 1775b).” The British cannon position on Noddle’s Island is mentioned in many of the accounts

of the battle (Anon 1775a; Anon 1775b; Graves 1775c). The identification of West Head can be found in William H. Sumner's (1858) *A History of East Boston*.

While a majority of the terrestrial landscape provided advantage to Provincial (American) forces, the navigable water sheet of Boston Harbor, principally Chelsea Creek, must be viewed as key terrain for British forces. It provided a tactical advantage as both the principle means of conveyance for British forces and as a firing platform for *HMS Diana* and other vessels in the fleet. The Chelsea Creek waterway served as an avenue of approach and withdrawal for the Royal Navy. Any vessels traversing this waterway could act as movable firing positions throughout the battle. The lack of Provincial control of this key terrain feature necessitated their long circuitous line of march both in approaching and withdrawing from the battlefield. Conversely, British control of this feature dictated the course of British actions. Admiral Graves's orders for *HMS Diana* were for that vessel to pursue and cut-off Provincial forces as they withdrew up Noddles Island to Hog Island and back to the mainland (Graves 1775d). Thus, the navigable channel of Chelsea Creek is included as a key terrain feature for the British.

A review of the documentary record identified a number of general land features and a few specific locations by name associated with the battlefield:

A. Winnisimmet Village/Winnisimmet Ferry: In 1631, the General Court of Massachusetts granted the right to operate a ferry between Winnisimmet and Boston to Thomas Williams. William's located his ferry landing near the base of Admiral's Hill at the foot of Broadway. After his death operation of the ferry passed to Samuel Maverick who had gained title to the land around Admiral's Hill. In 1634, Richard Bellingham (future Governor) purchased land at Winnisimmet from Samuel Maverick and John Blackleach along with the rights to the associated ferry. Bellingham moved the ferry landing from its original position near the base of Admiral's Hill at the foot of Broadway east to the foot of Winnisimmet Street near the present Fitzgerald Shipyard in Chelsea (Chamberlain 1908). While there were several landings and slipways along the Chelsea waterfront, Winnisimmet Ferry continued to occupy this location until its closure in the early 20th Century and it was here that the decisive engagement of the Battle of Chelsea Creek took place.

Winnisimmet Village and Ferry became a strategic location with the closure of the Port of Boston. In April 1775, Vice Admiral Samuel Graves records, "I have also hired a small Sloop of 25 Tons which I have placed between Noddles Island and the Main near Winnisimmet Ferry; through this passage I find much Smuggling has been carried as it is extremely convenient and near to the two Towns (Clark 1964: 59-60)." This sloop is likely the *HMS Britannia* that was engaged at Winnisimmet Ferry coming to the aid of the *HMS Diana* during the Battle of Chelsea Creek.

Winnisimmet Village and Ferry was a key terrain for the Provincials during the May 27-28, 1775 Battle of Chelsea Creek. The decisive engagement of the two day battle was fought here culminating in the grounding and burning of the *HMS Diana* (ADM 1/5307; Barker 1774-1776; Graves 1775d; Anon 1775a; Anon 1775b). John Dawson, sailing master of the *Diana*, testified that "the Tide notwithstanding set us on the ferry ways at Winnisimmet -The Rebels all this time keeping a very hot fire upon us from the Houses behind Walls and other Covers (ADM 1/5307)."

Farnsworth (1775-1779: 80-81) recorded in his journal: “At night March^d, to Winnisimit ferry whare thare was A Schooner and Sloop Afiring with grate fury on us thare But thanks be unto god that gave vs the Victry at this time for throu his Providence the Schooner that Pla^d upon us the day before run Aground and we Sot fiar to hur And Consumed hurt hare And the Sloop receved much damage.”

B. Mount Bellingham: Mount Bellingham is a drumlin feature roughly encompassed within the triangle created by Broadway, Central Avenue, and Eastern Avenue in Chelsea. This hillock was included in Bellingham’s 1634 purchase of land at Winnisimmet. This is where the named derived (Chamberlain, *et al* 1908). The exact role this key terrain feature played in the May 27 – 28, 1775 Battle of Chelsea Creek is unclear. If utilized by the Provincials, Mount Bellingham would have provided an excellent line of sight to observe the British position on Noddles Island Hill (See Observation below). Roads from Medford and Winnisimmet Ferry did converge near Mount Bellingham’s base allowing for the possibility that this is the knoll referred to in the account of James Stevens (above).

C. Mill Hill: Mill Hill is a small drumlin feature lying easterly of Broadway in Chelsea and adjacent to the Slade Tide Mill in Revere. Mill Hill lies across Snake Creek from the rise of ground identified as “Chelsea Neck” by McKay (below). This key terrain feature provided the Provincial militia with a firing position that enabled them to catch the *Diana* in a cross fire with elements positioned on Chelsea Neck. Mill Hill is a better fit for the knoll described by James Stevens (above) than Mount Bellingham and is likely the first position occupied by Putnam on his arrival in Chelsea (Stevens 1775-1776). Today, the site is occupied by apartments and the ruins of the old Forbes Lithographic Company.

D. Chelsea Neck: McKay (1925:13) relates that the “high ground, easterly of Powderhorn Hill and lying in Revere, north of Snake Creek, thence around into Winthrop was in the early days called Chelsea Neck, since the lay of swamps and creeks converted it into the semblance of a strip of land.” It was on this key terrain feature that Stark and Nixon deployed their men in line of battle as described above (Anon 1775b). Chelsea Neck likely included the Newgate/Yeaman House where battle eyewitness Elizabeth Hasey reported seeing a Provincial cannon position (Chamberlain 1908). Chelsea Neck together with the Slade Tide Mill and Mill Hill formed a dangerous cul-de-sac that exposed the *Diana* to Provincial fire from three directions and threatened to trap her in upper Chelsea Creek.

E. Hog Island (Orient Heights): Hog Island occupied a strategic position northeast of Noddles Island between that island and the Chelsea Mainland. The dominate terrain feature characterizing Hog Island was a 152 foot drumlin (Orient Heights) that provides a nearly 360° view of the battlefield. In 1775, the island was owned by Oliver Wendell, a resident of Kingston, and Jonathan Jakson of Newburyport, who were content to leave the running of the farm to manager, William Harris (Anon 1775b). A letter from H. Prentiss to Oliver Wendell dated May 12, 1775 bears testimony to the position in which Harris found himself on Hog Island. Prentiss related that “Mr. Harris is very uneasy, the people from the Men of War frequently go to the Island to Buy fresh Provision, his own safety obliges him to sell to them, on the other Hand the Committee of Safety have thretned if he sells anything to the Army or Navy, that they will take all the Cattle from the Island, & our folks tell him they shall handle him very rufly (Prentiss 1775).” At 11 AM

on the morning of May 27th, Stark and Nixon crossed Belle Island Creek from the Sales Farm and began liberating the livestock on Hog Island (Anon 1775b; De Guines 1775). Estimates list 300 to 400 sheep together with horses and cows were taken from the Island. During midafternoon, a detachment of 30 men including Corporal Amos Farnsworth crossed to Noddles Island to begin work there. Their actions came to the attention of British Captain John Robinson aboard the *HMS Preston* touching off the Battle of Chelsea Creek (Robinson 1775a). Control of Hog Island allowed Provincial forces to maintain communications with the Chelsea Mainland during early phases of the battle.

F. Hog Island Marsh: In 1775, Hog Island Marsh was a 50 acre area tide land separating Hog Island from Noddles Island. Crooked Creek, or Crooked Lane as it was also called, was a tributary of Chelsea Creek that bisected this marsh. A rudimentary road crossed this marsh linking Hog Island and Noddles Island to the Chelsea Mainland. Crooked Creek could only be forded at low tide making Hog Island Marsh a key terrain feature during the Battle of Chelsea Creek. Provincial control of Hog Island Marsh allowed for easy communication between main body of militia, under Stark and Nixon on Hog Island, with the 30 man detachment that included Amos Farnsworth working on Noddles Island. A sharp engagement (see below) took place here as British Marines advanced upon the Farnsworth detachment (Sumner 1858; McKay 1925; Tentindo and Jones 1978). Today, the boundaries of Hog Island Marsh can be delineated as an area of low lying filled tide lands lying southeast of the rise of Orient Heights in East Boston. Current land use is described in the Field Investigations chapter that follows, but a portion includes Orient Heights Square and athletic fields for the City of Boston.

G. Noddles Island Hill/West Head: The place name “Noddles Island Hill” appears in accounts of the Battle of Chelsea Creek as the location of the British artillery position on Noddles Island. In “A Circumstantial Account Of The Late Battle At Chelsea, Hog Island, &c” the author records that during the burning of the *Diana* “a heavy cannonading was begun, at Noddles Island hill, with the 12 pounders upon the provincials (Anon 1775b).” The identification of West Head as the hill in question can be found in William H. Sumner’s (1858) *A History of East Boston*. Possession of this key elevation conveyed two distinct advantages to the British. First, West Head provided an excellent view over much of the Chelsea shoreline and of Chelsea Creek itself. Second, the British artillery position here commanded both a key segment of Chelsea Creek and Winnisimmet Ferry (see Observation and Fields of Fire below). It was hoped that artillery at this position would be enough to cover British vessels as they ceased operations and attempted to withdraw from Chelsea Creek.

H. Noddles Island Smith Hill: The Smith Hill place name does not appear in any account of the Battle of Chelsea Creek, however this was a key terrain feature for the British. Smith Hill was the location of the British naval storehouses, wharf, and mansion house occupied by Henry Howell Williams (Sumner 1858; Tentindo and Jones 1978). Graves’s desire to protect the vital stores housed on Smith Hill prompted him to act once the Provincial threat was known. Smith Hill was an important staging area throughout the May 27th – 28th battle, but was spared from any direct involvement. There is evidence that the *Britannia* tied up to the wharf with many casualties after being badly damaged during the battle (Clark 1964: 606-607). Smith Hill became the Provincial objective during subsequent actions on Noddles Island from May 29 – June 10.

Williams's mansion and naval cooperage was burned on May 29th - 30th (Noddles Island Papers 1775-1814). The naval storehouse was burned on June 10th (Tentindo and Jones 1978).

I. Chelsea Creek/Chelsea River Navigable Water: Chelsea Creek/ Chelsea River extends roughly two miles from its mouth near the Meridian Street Bridge east and north to Mill Hill where it becomes Snake Creek. Today, these creeks serve as the boundary between Chelsea and Revere. The Chelsea Creek waterway served as an avenue of approach and withdrawal for the Royal Navy. Any vessels traversing waterway could act as movable firing positions throughout the battle. Lack of Provincial control of this key terrain feature necessitated their long circuitous line of march both in approaching and withdrawing from the battlefield. Conversely, British control of this feature dictated the course of British actions. Admiral Graves's orders for *HMS Diana* were for that vessel to pursue and cut-off Provincial forces as they withdrew up Noddles Island to Hog Island and back to the mainland (Graves 1775d). Thus, the navigable channel of Chelsea Creek is included as a key terrain feature for the British.

4.2 Observation and Fields of Fire

This component is characterized by the ability of the combatants to see over a particular area and acquire targets of the opposing force.

4.2.1 Observation

Key terrain features provide a point of observation. These locations are not simply high ground or unobstructed views. Rather, they are places from which critical observation took place and are recorded. These points of observation can best be explained by referencing the maps that follow (Figure 4.2). The view sheds or lines of sight from each point are illustrated, blue denotes Provincial (American) and red British. The colored areas are what was visible to a person standing at the given observation point.

British naval vessels are included here as individual movable observation points. Captain John Robinson of the *HMS Preston* (Figure 4.3) was the first to record seeing Provincials at approximately 2 o'clock in the afternoon "on Noddles Island destroying some hay (Robinson 1775a)." From the position of the *HMS Preston*, it can be seen that Captain Robinson was observing Provincial activity on West Head.

A. Mount Bellingham: Mount Bellingham is a drumlin feature roughly encompassed within the triangle created by Broadway, Central Avenue, and Eastern Avenue in Chelsea. The exact role Mount Bellingham played in the May 27 – 28, 1775 Battle of Chelsea Creek is unclear. If utilized by the Provincials, Mount Bellingham would have provided an excellent line of sight to observe the British position on Noddles Island Hill (See Observation below). Roads from Medford and Winnisimmet Ferry did converge near Mount Bellingham's base allowing for the possibility that this is the knoll referred to in the account of James Stevens (above). (Figure 4.4)

B. Mill Hill: Mill Hill is a small drumlin feature lying easterly of Broadway in Chelsea and adjacent to the Slade Tide Mill in Revere. Mill Hill juts out into Chelsea Creek like a thumb providing a salient feature with good lines of sight over upper Chelsea Creek. This position enabled Provincial troops to see up Sale Creek, Belle Island Creek, and down Chelsea Creek as

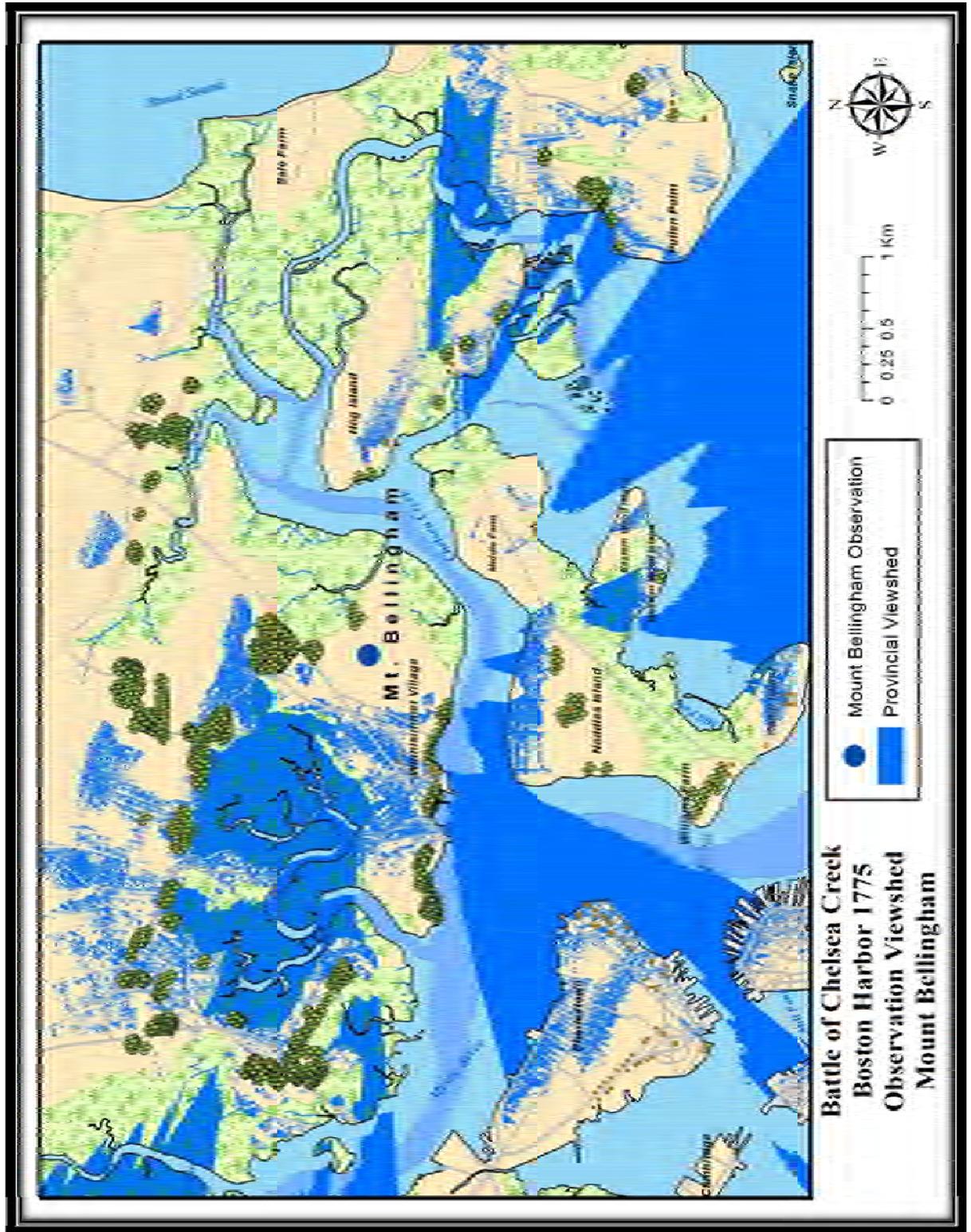


Figure. 4.4. Field of View: Mount Bellingham.

far as Hog Island. This feature is most likely the knoll referred to in the account of James Stevens (above) (Figure 4.5).

C. Noddles Island Hill (West Head): Noddles Island Hill/West Head provided an excellent view over much of the Chelsea shoreline and of Chelsea Creek itself. British marines positioned here could see northeast up Chelsea Creek as far as its bend at Mill Hill. While it was day, this viewshed allowed the British to observe Provincial movements along the key Provincial position at Winnisimmet. During the night of May 27 – 28, the British used West Head to observe the progress of the *Diana* as she attempted to extricate herself from upper Chelsea Creek. The British placed an artillery battery at this position in an attempt to cover the *Diana's* withdrawal (below) (Figure 4.6).

4.2.2 Fields of Fire

The firing positions are colored coded according to which belligerent occupied the area, blue for Provincial (American) and red for British. Small arms fire was depicted with a maximum effective range of 100 meters. The range of cannon fire is quite variable given the diversity of cannon ratings and gun crew skills. The effective range was averaged to be depicted as 1,000 yards. The prevailing direction of fire is depicted in direction of opposing forces.

Fields of fire include, but are not limited to, key terrain and observation points. Provincial artillery positions at the Newgate/Yeaman House and at Winnisimmet Ferry were located to command the main channel of Chelsea Creek. These locations are mentioned in both Provincial and British accounts (Stevens 1775-1776; ADM 1/5307). The British artillery position is mentioned in several accounts as being on West Head (Anon 1775a; Anon 1775b; Graves 1775c; Sumner 1858). It was hoped that artillery at this position would be enough to cover British vessels as they ceased operations and attempted to withdraw from Chelsea Creek. Provincial small arms fire came from several positions. The crew of the *HMS Diana* reported coming under musket fire from “the Houses behind Walls and other Covers” as they made their way past Winnisimmet Village (ADM 1/5307). They also reported taking small arms fire from Noddle’s Island, Hog Island, and the Main (ADM 1/5307). British naval vessels acted as movable firing positions throughout the battle with their fields of fire dictated by their location. Fields of fire and predominant direction of fire are delineated by red lines (Figure 4.7).

4.3 Cover and Concealment

For this component, cover is protection from the effects of fire, while concealment is protection from observation.

In the previous component sections, we have already seen that the Provincials were using key terrain features and Winnisimmet Village as cover (Stevens 1775-1776; ADM 1/5307). What has yet to be explored is the Provincial use of the marshes along Chelsea Creek as cover. The small inlets and ditches made by feeder streams emptying into Chelsea Creek’s tributaries provided ready-made trenches that the Provincials used as cover. The engagement between Corporal Amos Farnsworth’s detachment and Royal Marines at Crooked Creek (Hog Island Marsh)

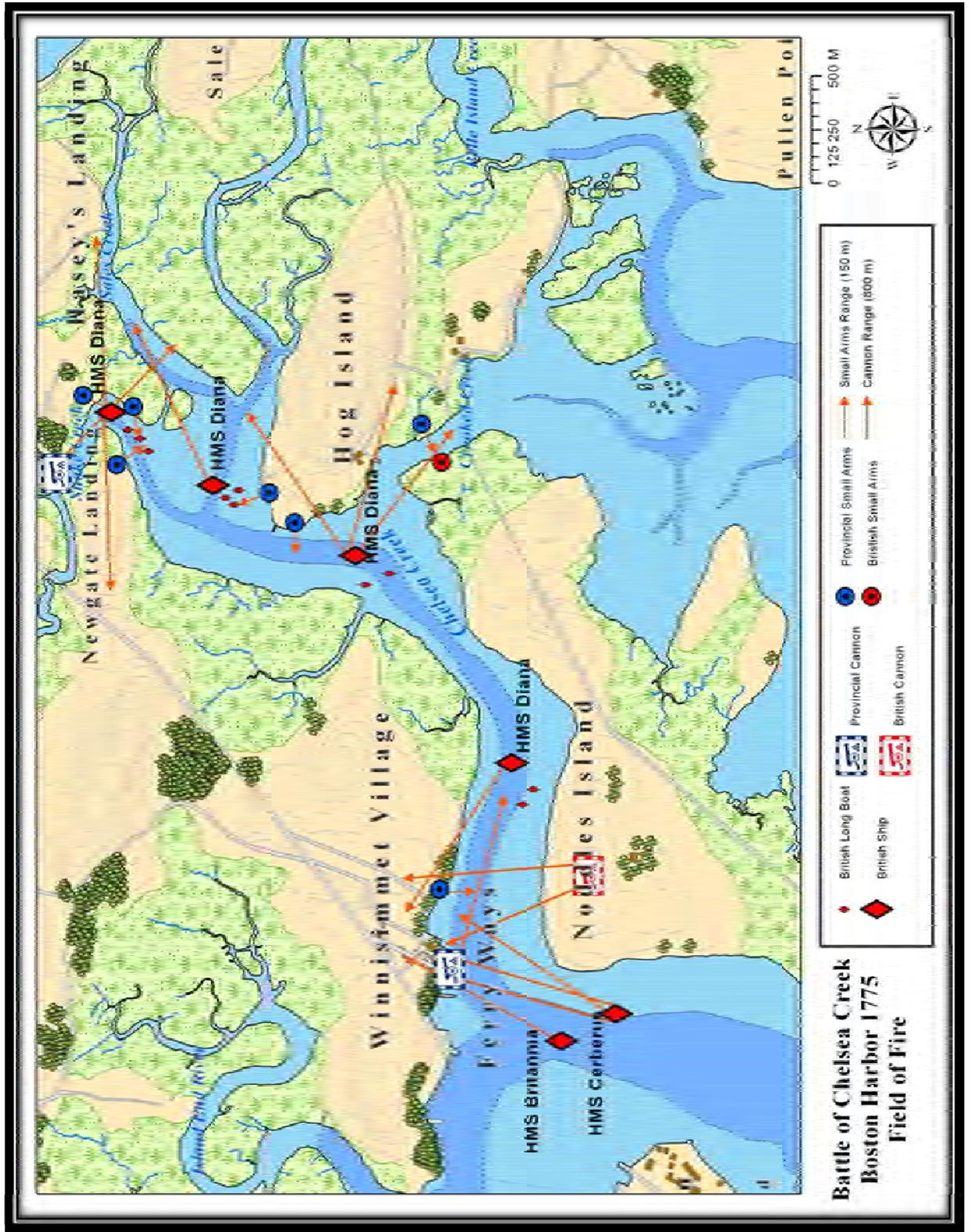


Figure 4.7. Field of Fire

illustrates the use of these expedient trenches. Farnsworth wrote: “we Crost the river and about fiften of us Squated Down in a Ditch on the mash and Stood our ground. And thare Came A Company of Regulars on the marsh on the other side of the river And the Schooner: And we had A hot fiar until the Regulars retreated. But notwithstanding the Bulets flue very thitch yet there was not a Man of us kil^d (Farnsworth 1775-1779: 81).”

British forces, by contrast, did not have the same terrain features available to them or failed to take advantage of them. British military doctrine required the use of linear formations with firing by platoon to make best use of their shoulder arms (Nardo 2003). There is no evidence that they acted contrary to this doctrine at Crooked Creek. The sailors in the vessels making their way up Chelsea Creek were equally exposed. The crew aboard the *HMS Diana* was fairly well protected from Provincial small arms fire. It was not until the *Diana* grounded and the Provincial artillery could be brought bear that their position became untenable. However, the sailors in the longboats trailing the *Diana* would have suffered horribly. We know that at least two seamen from the *HMS Somerset* were killed as they tried to tow the *Diana* out of the upper reaches of Chelsea Creek (LeCras 1775b).

The same terrain features that offered cover to Provincial forces served to conceal their movements from British observers throughout much of the battle. There were few roads in the Chelsea area in 1775 and these tended to wind their way around the base of high terrain. Elevations like Mount Bellingham, Mill Hill, and Hog Island (Orient Heights) itself lay between the roads and British observation points. Provincial forces moving along these roads at night were invisible to British ships in the harbor. It was not until 2 PM in the afternoon on May 27th, when Provincial troops set fire to hay and houses on Noddle’s Island, that the British became aware of what was happening (Robinson 1775a). Those terrain features offering cover and concealment are shaded in gray on the following map (Figure 4.8).

4.4 Obstacles

For this component, an obstacle is any natural or manmade obstruction that disrupts movement. Obstacles encountered by the Provincial forces during the Battle of Chelsea Creek are indicated on the following map by areas of cross hatching (Figure 4.9).

A. Chelsea Creek: Chelsea Creek and its tributaries were the biggest obstacles confronting Provincial forces throughout the Battle of Chelsea Creek. British naval vessels controlled Boston Harbor making it impossible for the Provincials to utilize the few small boats they possessed to effect a direct crossing to Noddle’s Island or Hog Island. A letter from Vice Admiral Samuel Grave to Philip Stephens dated April 11, 1775 describes the purchase of a small 25 ton sloop (Clark 1964: 59-60). This sloop was likely the *HMS Britannia* and it was strategically positioned in the mouth of Chelsea Creek opposite Winnisimmet Ferry with the express purpose of interdicting naval traffic in and out of the creek (Clark 1964: 59-60). British control of the waterways necessitated the long circuitous avenue of approach adopted by Provincial forces. This avenue of approach crossed the tributaries of Sale Creek, Belle Island Creek, and Crooked Creek. Negotiation of these tributaries required close coordination with low tide (Sumner 1858; Bossom 1900; McKay 1925; Tentindo and Jones 1978). The British labored under no such

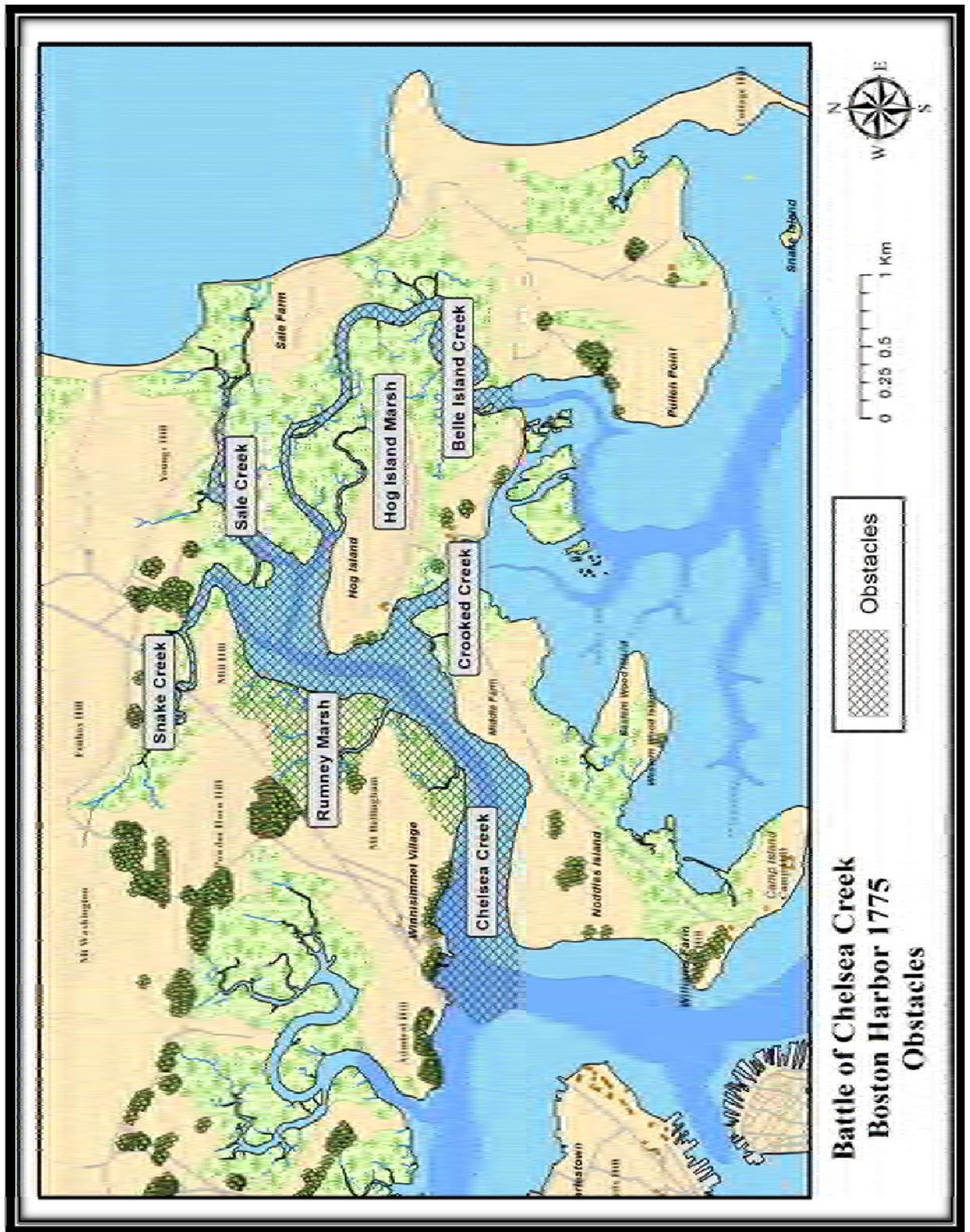


Figure 4.9. Obstacles

difficulties. Lieutenant Graves was simply ordered to “sail as high as possible to prevent [the Provincials] Escape (Graves 1775c).”

While Chelsea Creek provided a clear and readily definable natural obstacle to Provincial forces, the effects of a falling tide created tidal flats. More difficult to depict (or even predict) are the effects of tidal flats on troop movements. Exposed tidal flats may have facilitated the movement of individuals by providing additional crossing points and uncovering marsh land that could enhance cover and concealment. Soldiers herding captured livestock, however, would have had trouble negotiating the soft muddy terrain with animals in tow.

B. Belle Island Creek: Belle Island (Isle) Creek was a meandering tributary of Chelsea Creek that separated Hog Island (Orient Heights) from the Chelsea Mainland. The extensive marsh bordering Belle Island Creek had been used as pasture and for harvesting salt hay since the 1600’s. The creek itself was easily fordable at low tide at crossing places below the Sale Farm and above Pullen Point. Between 10 AM and 11 AM on the morning of May 27, 1775, Colonel John Stark and Colonel John Nixon made the crossing from Sale Farm with their men while the tide was still high (Anon 1775b; De Guines 1775; Ehret 2011). Captured livestock, the objective of the raid, could only cross at low water. This necessitated an earlier crossing by the Provincials and careful coordination with the low tide in order to herd the captured animals off the island. Present land use in the vicinity of the crossing point includes the 350 acre Belle Isle Marsh Preserve and Suffolk Downs Raceway.

C. Crooked Creek/Hog Island Marsh: Crooked Creek was a tributary of Chelsea Creek that separated Hog Island (Orient Heights) from Noddles Island (East Boston). Crooked Creek was wider and deeper than Belle Island Creek and together with bordering Hog Island Marsh presented a more formidable obstacle to Provincial movement. A rudimentary road connecting Noddles Island with Hog Island did provide a crossing place, but this ford was only accessible at low tide. A 30 man detachment of Provincial militia, which included Corporal Amos Farnsworth, did make the crossing from Hog Island to Noddles Island during mid-afternoon on May 27th (Farnsworth 1775-1779). Farnsworth’s stated time of “mid-afternoon” correlates well with the estimated low tide at 3:37 PM. The Farnsworth detachment had to conform their movements with low tide or risk being stranded on Noddles Island. As this detachment negotiated Hog Island Marsh on their return from Noddles Island, they came under fire first from the *HMS Diana* and then from the Royal Marines sent in pursuit. Once back across Crooked Creek, Farnsworth with 14 men formed a rear guard using one of the many ditches or drainages that crisscrossed the marsh as a natural fortification. The short, sharp engagement that followed resulted in at least two British casualties (Farnsworth 1775-1779).

4.5 Avenues of Advance and Withdrawal

The route a force can use to reach its objective or withdraw from an area can have a major impact in the course of action and the capabilities of the opposing forces. Topographic and cyclical environmental conditions proved to be factors directing affecting the movement of Provincial and British land and naval forces. The respective avenues of advance and withdrawal indicated on the following maps, blue for Provincial and red for British (Figure 4.10).



Figure 4.10. Avenues of Advance

4.5.1 Avenues of Advance

A. Provincial Advance: Aspects of the Provincial advance to Noddle's Island and Hog's Island have been discussed in previous sections. The route chosen basically conformed to the long established Old County Road or Road to Salem. A small deviation may have occurred when Provincial forces opted to take a more direct farm road from the Chelsea Meetinghouse to the Sale Farm during the morning of May 27th (Bossom 1900; MacKay 1925; Tentindo and Jones 1978). This line of march was concealed from British observation by darkness and terrain.

Tidal conditions would have certainly affected the Provincials movement across the marsh lands that surrounded Hog Island. Crossings of Belle Isle Creek and Crooked Creek would have to be coordinated with low tide. Although there appears to have been a rudimentary road network linking Noddle's Island with Hog Island and the Chelsea Mainland in 1775, there were no bridges. Crossings were made at natural fording places. Control of these fords was essential for Provincial troops lacking boats. Individual soldiers could cross marshes, tidal flats, and shallow creeks with little difficulty, but it would have been impossible to negotiate these terrain features with large numbers of livestock. Proper coordination with tidal fluctuations was a key factor in the Provincial success at Chelsea Creek.

B. British Advance: British forces advanced along two paths. Marines were landed at the wharf/ferry landing associated with the Williams Mansion on Noddle's Island and moved overland in pursuit of the Provincials. This route roughly conforms to present-day Saratoga Street in East Boston. At the same time, the *HMS Diana* with ten or twelve longboats proceeded up Chelsea Creek in an attempt to block Provincial withdrawal (Bossom 1900; MacKay 1925; Tentindo and Jones 1978).

An incoming spring or lunar tide which exceeded mean high water by 10 feet and favorable winds greatly facilitated *HMS Diana's* movement into the upper reaches of Chelsea Creek and allowed the possibility of the vessel entering Sales Creek (Hassey's Landing) and/or Snake Creek (tide mill). While Chelsea Creek is generally navigable, this advancing tide provided a much wider channel and deeper channels for Sale and Snake Creeks.

4.5.2 Avenues of Withdrawal

A. Provincial Withdrawal: The Provincials withdrew along the same line of march as they approached, save for one significant difference. While one party of Provincials withdrew with the captured livestock along the road back to the Chelsea Meetinghouse, another party moved through the marshes as they engaged the *Diana* (Figure 4.11). This interpretation is based upon testimony from the *Diana's* crew and reports of spent munitions found around the tide mill at the head of Chelsea Creek (ADM 1/5307; Chamberlain 1908).

While *HMS Diana* could move upstream taking advantage of tidal flow, the incoming tide would have hindered Provincial withdrawal through the marshes. As a result, the main body of these troops and their accompanying captured livestock were to move along the Beach Road and back to the farm path across the marsh after crossing Crooked Creek. Their destination was to be the Chelsea Meeting House. Given that *Diana* remained under small arms fire, some Provincial

troops must have moved along the western edge of Hog Island. These pathways are indicated in blue on the following map.

B. British Withdrawal: After the brief engagement at Crooked Creek, British land forces withdrew along their previous route of advance. British Marines camped on Noddle’s Island for a few days following the battle (Chads 1775; Robinson 1775b). This pathway is indicated in red. The rising tide and the becalming of the winds directly affected the movements of HMS *Diana*. The *Diana’s* advance placed her above the head of Chelsea Creek, likely in Snake Creek, perhaps as high as the tide mill. The advantages of the extreme high tide were quickly lost once Lieutenant Graves made the decision to withdraw from Chelsea Creek (Table 2 below). As the *Diana* came about in preparation for her return, the wind slackened. The incoming tide, which had previously facilitated *Diana’s* advance, now threatened to beach the *Diana* within easy reach of Provincial forces occupying both banks of the creek (Bossom 1900; McKay 1925; Tentindo and Jones 1978). The vessel’s movements were now dependent upon the ability of the accompanying long-boats to tow it down stream. Local tradition has the *Diana* grounding first at the head of Chelsea Creek, opposite Mill Hill before grounding again and for the final time at the Winnisimmet Ferry Ways; however, there is no confirming documentary evidence. Primary sources indicate that as the *Diana* reached a point opposite Winnisimmet Ferry Provincial forces placed in buildings and behind stone walls concentrated their fire on the sailors manning the long-boats. This fire compelled the long-boats to cast off leaving the *Diana* to drift westward (by this time the tide had shifted and was now going out once again) and ground on a sand bar near the ferry ways (ADM 1/5307).

Date - Day	Time	Height	Time	Height	Time	Height	Time	Height
23 – Tue	0542 H	10.3	1200 L	-0.1	1822 H	10.2		
24 – Wed	0030 L	0.4	0646 H	10.1	1259 L	0.1	1921 H	10.4
25 – Thu	0132 L	0.2	0748 H	10.0	1355 L	0.1	2017 H	10.6
26 – Fri	0230 L	-0.1	0846 H	10.0	1448 L	0.2	2108 H	10.8
27 – Sat	0324 L	-0.3	0940 H	10.0	1537 L	0.3	2155 H	10.9
28 – Sun	0413 L	-0.4	1028 H	9.9	1623 L	0.4	2239 H	10.9
29 – Mon	0458 L	-0.5	1114 H	9.8	1707 L	0.5	2321 H	10.8
30 – Tue	0541 L	-0.4	1157 H	9.7	1750 L	0.7		
31 – Wed	0002 H	10.6	0623 L	-0.2	1239 H	9.5	1832 L	1.0

Table 2: May 1775 Tide Predictions (High and Low Waters), Boston, Massachusetts, Datum MLLW, Standard Time (NOAA, National Ocean Service).

4.6 Defining Features

Each component of the KOCO analysis illustrates features of the battlefield. Critical defining features are those that were significant to the outcome of the battle. Certain less obvious environmental conditions such as tides and winds are factors to be considered as they can have an effect upon KOCO components (Figure 4.12). The lack of local knowledge and precision in the documentary record made it difficult to identify the defining features on the actual battlefield. By subjecting the battle narrative to a KOCO analysis we were able to reasonably identify the location of key features on our geo-referenced reconstructed 1775 landscape. The KOCO analysis and defining features are crucial laying out the boundaries of the battlefield, defining areas of archeological potential, and identifying management strategies.

A. Rear guard action at Crooked Creek

A rear guard of Provincial troops took cover in a ditch on the Hog Island shore of Crooked Creek. This rear guard included Corporal Amos Farnsworth of Colonel William Prescott's Regiment and 14 men of the 30 man detachment sent to Noddle's Island. Farnsworth wrote of the skirmish: "I with five men got of the horse And Before we got from Noddels island to hog island we was fir^d upon by a Privatear Schooner But we Crost the river and about fifteen of us Squated Down in a Ditch on the mash and Stood our ground. And thare Came A Company of Regulars on the marsh on the other side of the river And the Schooner: And we had A hot fiar until the Regulars retreated. But notwithstanding the Bulets flue very thitch yet thare was not a Man of us kil^d (Farnsworth 1775-1779: 81)." This location became the northern limit of British land forces advancement. After this encounter, British land forces withdrew toward the center of Noddle's Island. The land phase of British operations effectively ends, except for artillery bombardment from West Head.

B. Grounding of Diana at Ferry Ways

The movements of *HMS Diana* parallel the progress of the battle. The flowing bottom lands of Chelsea Creek became obstacles to *Diana's* progress as they became exposed due to the falling tide. The location of the final grounding, which in turn becomes the place of stripping and burning *HMS Diana*, is described by Stevens (1775-1776) and Barker (1774-1776). The capture and destruction of this vessel effectively ends British naval operations in this battle. It is the defining event of the battle – the first loss of a British naval vessel and first American combat victory of the American War of Independence.

C. Placement of troops in firing position (including cannons)

In examining potential fields of fire, a number of locations have identified for the placement of Provincial small arms fire. With the exception of Winnisimmet Village/ferry ways and Crooked Creek, the remaining locations of engagement cannot be pinned down with certainty.

One such important, but difficult position to locate with certainty is "Chelsea Neck." "Chelsea Neck" is mentioned as a Provincial firing position in the June 8, 1775 *New York Journal* article entitled "A Circumstantial Account Of The Late Battle At Chelsea, Hog Island, &c (Anon

1775b).” “Chelsea Neck,” however, was not a commonly used or recognizable name. Robert D. McKay (1925: 13) reported that: “The high ground, easterly of Powderhorn Hill and lying in Revere, north of Sales Creek, thence around into Winthrop was in the early days called Chelsea Neck, since the lay of swamps and creeks converted it into the semblance of a strip of land.” This area being described seems to equate to the present region of the Slade Tide Mill. Battle eyewitness Elizabeth Hasey confirms that the Provincials did indeed have a cannon position in the front yard of the Newgate/ Yeamans House which stood a short distance from the tide mill (Chamberlain 1908).

The area of West Head was identified as the firing point for British artillery. In “A Circumstantial Account Of The Late Battle At Chelsea, Hog Island, &c” the author records that during the burning of the *Diana* “a heavy cannonading was begun, at Noddles Island hill, with the 12 pounders upon the provincials (Anon 1775b).” The identification of West Head as the hill in question can be found in William H. Sumner’s (1858) *A History of East Boston*. Possession of this key elevation conveyed two distinct advantages to the British. First, West Head provided an excellent view over much of the Chelsea shoreline and of Chelsea Creek itself. Second, the British artillery position here commanded both a key segment of Chelsea Creek and Winnisimmet Ferry.

D. Williams Mansion and Wharf

The mansion and associated wharf/ferry landing was the jumping off point for the land advance of British forces. After the battle, one source, an anonymous ship captain from Maine who was being detained on Noddles Island, has British casualties departing from this location. The unnamed captain related that “he was shocked to see the blood running out of the scuppers [of the *Britannia*]; there was a number of dead and wounded lying on deck, but the survivors did not care to tell how many (Clark 1964: 607).” The house was later destroyed by subsequent actions by Provincial forces on May 29, 1775 (Graves 1775c; Williams 1775).

E. Chelsea Meeting House

The Chelsea Meeting House is a key location for Provincial troop assembly throughout this battle. Troops assembled here for the successful raid on Hog and Noddle’s Islands. After withdrawing with livestock, they regrouped and rested here before proceeding to Winnisimmet for the final engagement with *HMS Diana*.

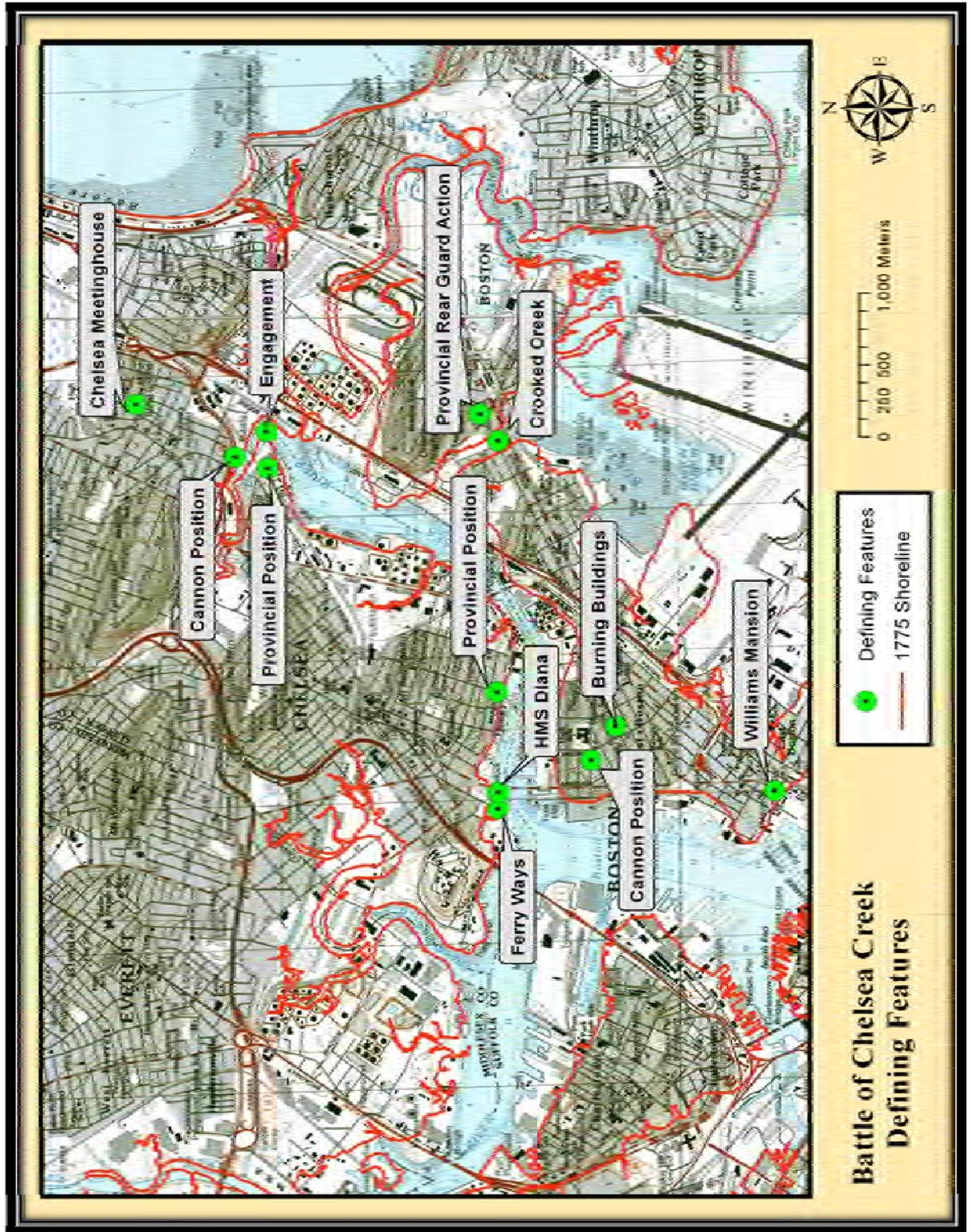


Figure 4.12. Defining Features

5. FIELD INVESTIGATION

For the purposes of this study, field investigation was limited to visual inspection of the entire study area by windshield and walkover survey (where possible). Using the geo-referenced 1775 landscape, we were able to derive relatively accurate locations for the features of the battle. The locations for each distinctive feature and battlefield event were then depicted through Google Earth. For the purposes of preliminary ground-truthing, each location was then visited in person by project staff.

Windshield surveys of the study area were on-going over the entire grant period. A systematic inspection of potential battlefield features was conducted in the Spring and Summer of 2011. Using Google Earth imagery, the defining features and locations of battlefield events were relocated in the study area. As most properties are currently privately owned (and/or managed), site visits were restricted to public right-of-way (e.g., streets and sidewalks).

While a goal of this study was to identify property owners within the battlefield, there are tens of thousands of resident structures and commercial and industrial facilities currently occupying the lands that comprise the battlefield. The size and complexity of the task of creating a comprehensive list of property owners could not be reasonably accomplished within this initial phase of research. MassGIS has a parcel map data layer which includes the communities of (East) Boston, Chelsea, and Revere. Winthrop is not included in this data layer. Unfortunately, this data layer (Appendix E) identifies 10,860 separate parcels, but does not provide names of parcel owners.

Ground-truthing activities were limited to observations of surface features and extant structures. Sub-surface testing was not proposed under the approved research design. These locations were then photo-documented. These preliminary investigations generally confirmed that most locations were densely populated urban neighborhoods and/or industrial operations occupying filled tidelands.

With the exception of the Provincial Battery at Winnisimmet Village and the Newgate/Yeamans House, the location of Provincial and British artillery batteries is conjecture based upon primary descriptions and the assumption they were placed on high ground. Thus, the British West Head (East Boston) gun position is vaguely described and the other Provincial Mill Hill and Mt. Bellingham (Chelsea) positions were only very suggestive and have been dismissed as being used. In addition, there is no mention of fortifying these temporary gun positions. The sections of high ground at each postulated position are densely packed urban residential neighborhoods.

The locations within the study area identified as defining features or potential core areas and subjected to field investigation are described below:

5.1 Hog Island Summit

The entire battlefield is observable from the summit of Hog Island (today, Orient Heights section of Boston). While there is no record of Provincial forces occupying this location, it offers a commanding view of the entire battlefield (Figures 5.1 and 5.2). These vistas enhanced our

understanding of KOCOA derived features and aided in our understanding of battlefield events. Certain defining features now obstructed by filling and development activities still had a visible signature on the landscape. For example, the course of Crooked Creek (now completely filled) was clearly discernable as low topography which clearly coincided with its predicted location.

5.2 Williams Wharf and Mansion

The jumping off point for the British land force was the Williams Wharf on Noddles Island. The probable location of the Williams Wharf and Mansion were derived from geo-referencing the historic maps. These associated battle event features are located in what is now known as the Maverick Square section of East Boston (Figure 5.3). The approximate location of these historic structures, as suggested by geo-referenced historic maps, is under the street adjacent to the surface entrance the subway station. Substantial subway terminal construction, extensive urban infra-structure, and local redevelopment activities have significantly reduced the likelihood of site preservation.

5.3 West Head of Noddles Island

Two battle events occur in the area of West Head on Noddles Island (East Boston). One is the barn burnt by Provincial troops and spotted by HMS *Preston*. The other is the position of the British artillery batteries which fired on Winnisimmet Village.

As derived from geo-referencing the historic maps, the probable location of Yeamans' barns was placed along the northern slope of West Head (Sumner 1858; McKay 1925; Tentindo and Jones 1978). Smoke from these burning barns was spotted by HMS *Preston* and thus alerted British forces to the presence of Provincial forces on Noddles Island. There are no detailed contemporary descriptions of these barn structures. We can only speculate as to their size or construction (i.e., did they utilized a stone foundation or wooden sill, or no sill?). Unless there was some form of structure foundation, the possible attributes for any archeological signature may be indistinguishable from other possible cultural activities at this location or survived modern property development. The area is currently comprised of densely spaced multi-story structures and brick faced church (Figure 5.4). Development activities have significantly reduced the likelihood of site preservation.

The location of British artillery batteries is conjecture based the primary descriptions and the assumption they were placed on high ground. Thus, the British West Head (East Boston) gun position is very suggestive. While we know Admiral Graves placed two 3 pound naval cannon and General Gage placed two 12 pound field artillery pieces at this battery, there is no mention of fortifying this temporary gun position. This position was manned for two to three days. Thus, any tracks laid down by the cannon would have only been superficial and thus indistinguishable from other possible cultural activities at this location. Further, there is no evidence of counter battery fire from Winnisimmet Village, such as spent cannon shot, reported in this area. The location of the summit (high point) of West Head was derived from geo-referencing the historic maps. This section of the high ground is characterized as densely packed urban residential neighborhoods and the heavily modified grounds of East Boston High School (Figure 5.5). Architectural styles typified by early twentieth century wooden multi-story apartment dwellings,

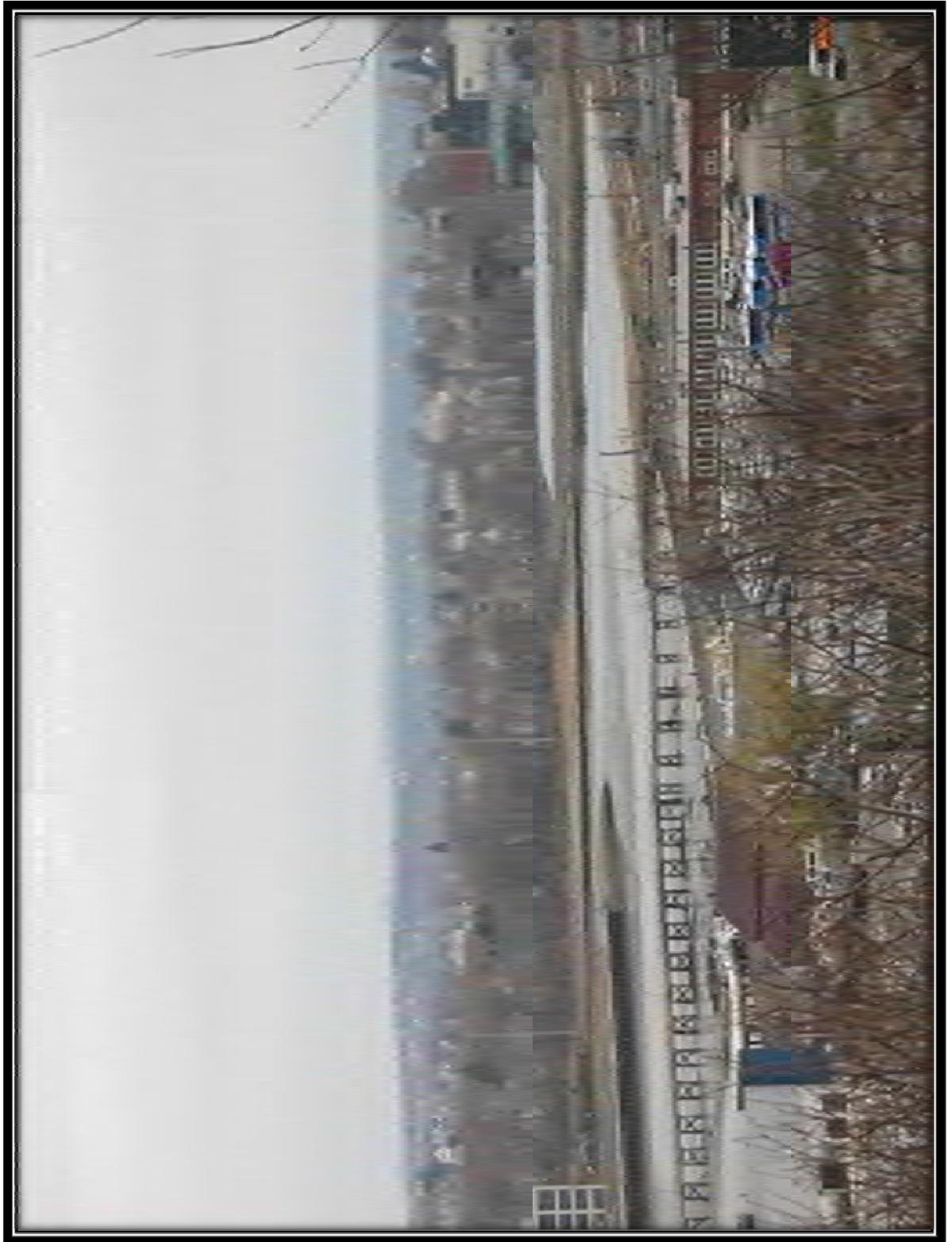


Figure 5.1. Battlefield panoramic view from Hog Island summit looking north.



Figure 5.2. Battlefield panoramic view from Hog Island summit looking south.



Figure 5.3. Approximate location Williams Wharf and Mansion.

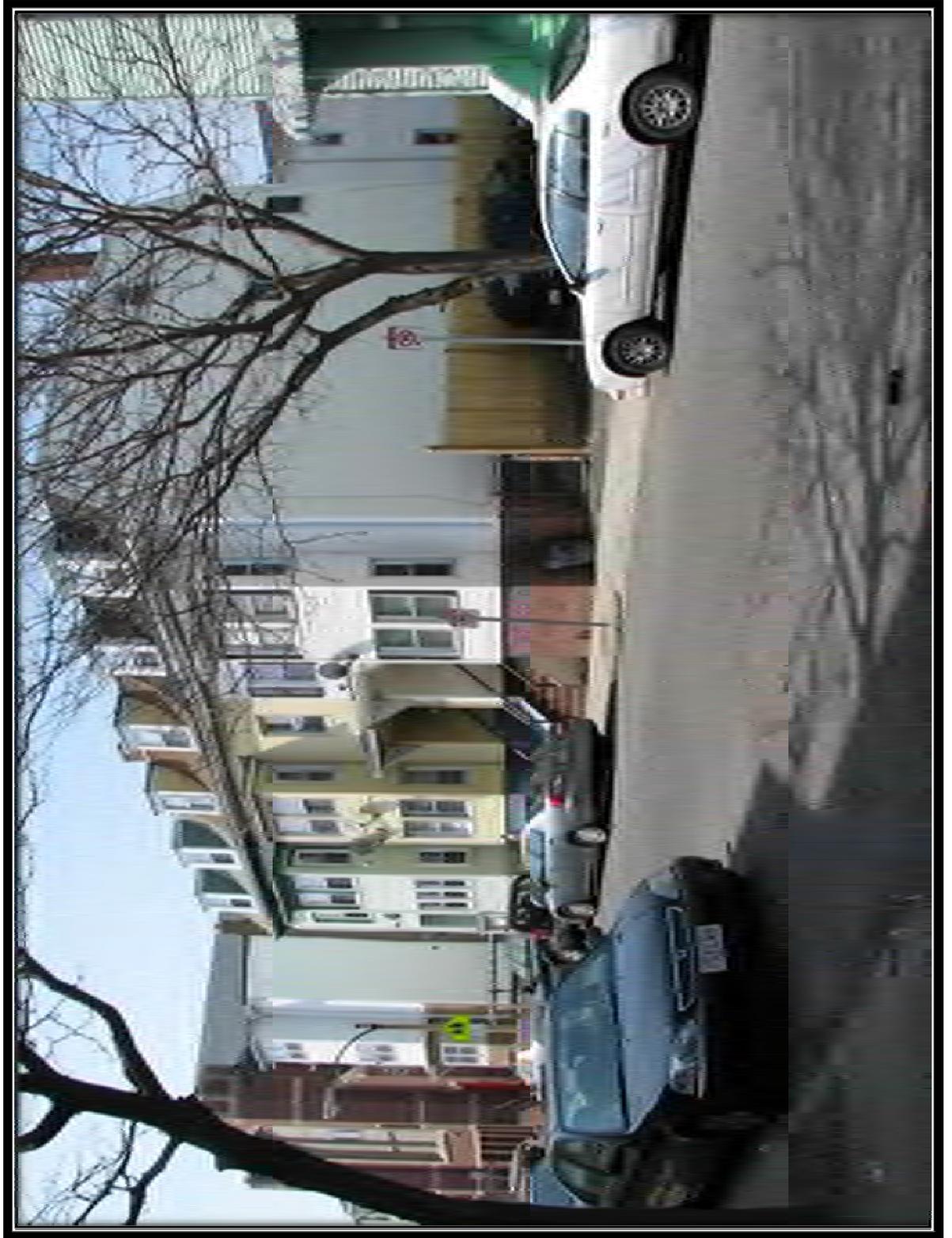


Figure 5.4. Approximate location of barns burnt on Noddles Island.



Figure 5.5. Approximate location of British battery on West Head.

commonly referred to as triple-deckers. Construction activities have significantly reduced the likelihood of site preservation.

5.4 Engagement at Crooked Creek

The engagement along Crooked Creek involves both British land and naval forces and Provincial troops. We know the HMS Diana was firing on Provincial troops as they withdrew across Crooked Creek. The precise location of British and Provincial forces along Crooked Creek is conjecture based the primary descriptions and the geo-referenced reconstruction of the location of ditches/small feeder creeks and the path crossing Crooked Creek.

One informant related a family story from the first decade of the twentieth century which had his grandfather finding lead shot in the field and marsh across from their home at 81 Addison Street in East Boston (Joe Morales, personal communication). This location is at the southern shore of Crooked Creek as it enters Chelsea Creek. This would have been opposite the approximate location of HMS Diana when the vessel commenced firing on the Provincial troops along Crooked Creek. Today, this location is under a large factory building with concrete pad (Figure 5.6). The field and marsh no longer exist. Unfortunately, the lead shot was not saved. While the lead shot could have been remains of the battle, there is another likely source, birding. The marshes surrounding Hog and Noddles Island were used heavily for hunting aquatic birds (e.g., migratory ducks and geese) from colonial times through early twentieth century (Rick Terenzi, Revere Historical Society: personal communication). The nature of the shot could be confirmed through analysis of the caliber, weight, and material of construction.

Our analysis placed this location at generally in the vicinity of today's Orient Heights Square at the intersection of Saratoga and Boardman Streets (Figure 5.7). The historic creek bed is discernable as low lying filled tidelands. Much of it is occupied by City of Boston athletic fields with adjacent roads slightly elevated above it. Architectural styles typified by early twentieth century wooden multi-story apartment dwellings, commonly referred to as triple-deckers and public housing projects. Fill and building activities may have significantly reduced the likelihood of site preservation. However, additional ground-truthing, intensive archeological sampling and geophysical surveys should be considered to identify preserved remnants of the creek, ditches, and the ford as well as the firing positions of the opposing forces (which would only be discernible by spent musket shot).

5.5 Mill Hill/Chelsea Neck

The confluence of Snake (Mill) Creek and Sale Creek, which forms the head of Chelsea Creek, is bounded Chelsea Neck and Mill Hill. This area forms a natural cul-de-sac where HMS Diana was trapped when the tides began to fall and the winds deadened. Cannon balls and grape shot were reported recovered from this general area, particularly at the site of the Newgate/ Yeamans House where battle eyewitness Elizabeth Hasey describes the Provincial artillery position (Chamberlain 1908). "A Circumstantial Account Of The Late Battle At Chelsea, Hog Island, &c (Anon 1775b)," identifies Chelsea Neck as a Provincial position. The unnamed author relates, "Having cleared Hog Island, the provincials drew up on Chelsea Neck, and sent for a reinforcement of 300 men, and 2 pieces of cannon (four pounders) which arrived about 9 o'clock

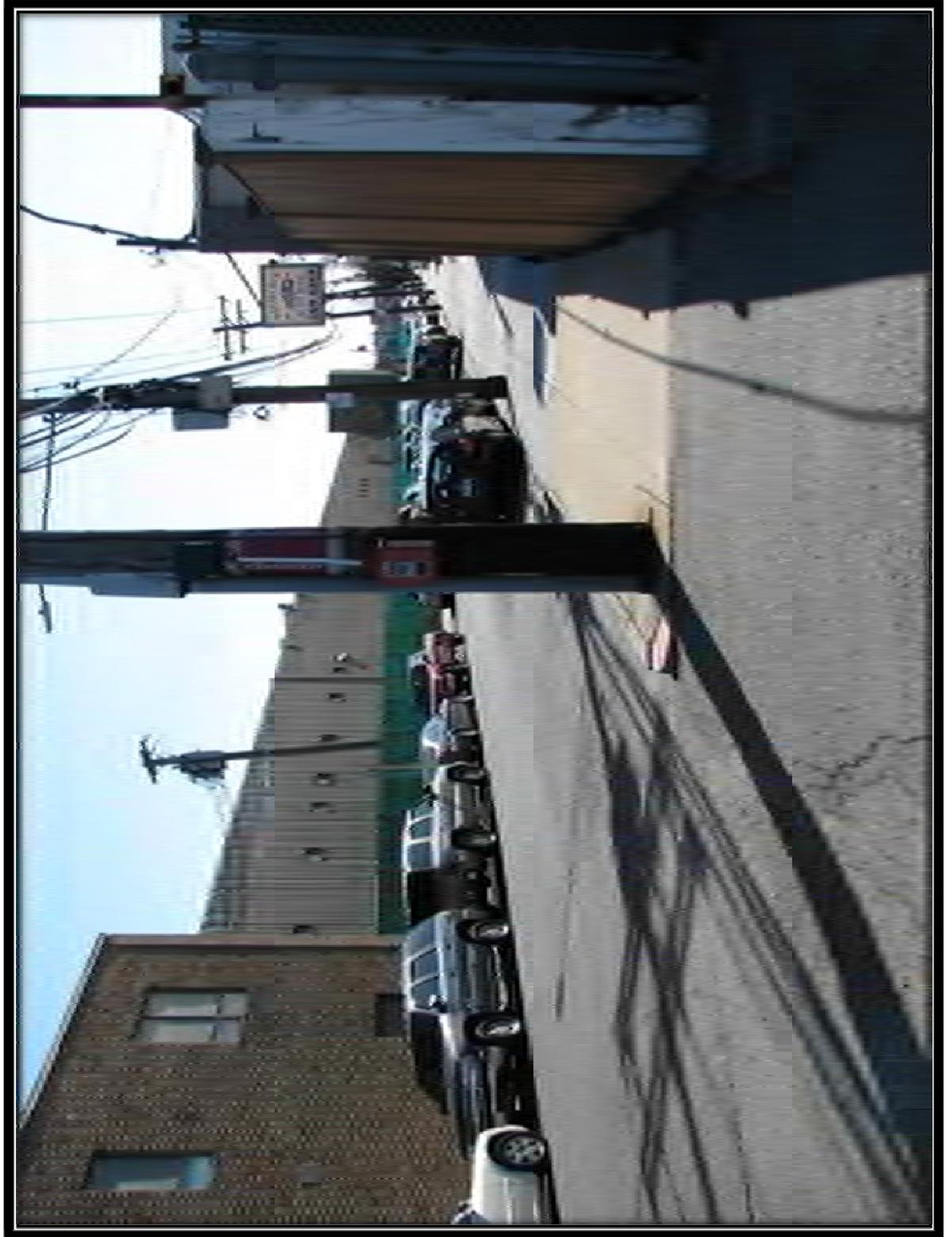


Figure 5.6. Approximate location of where shot was reportedly found.

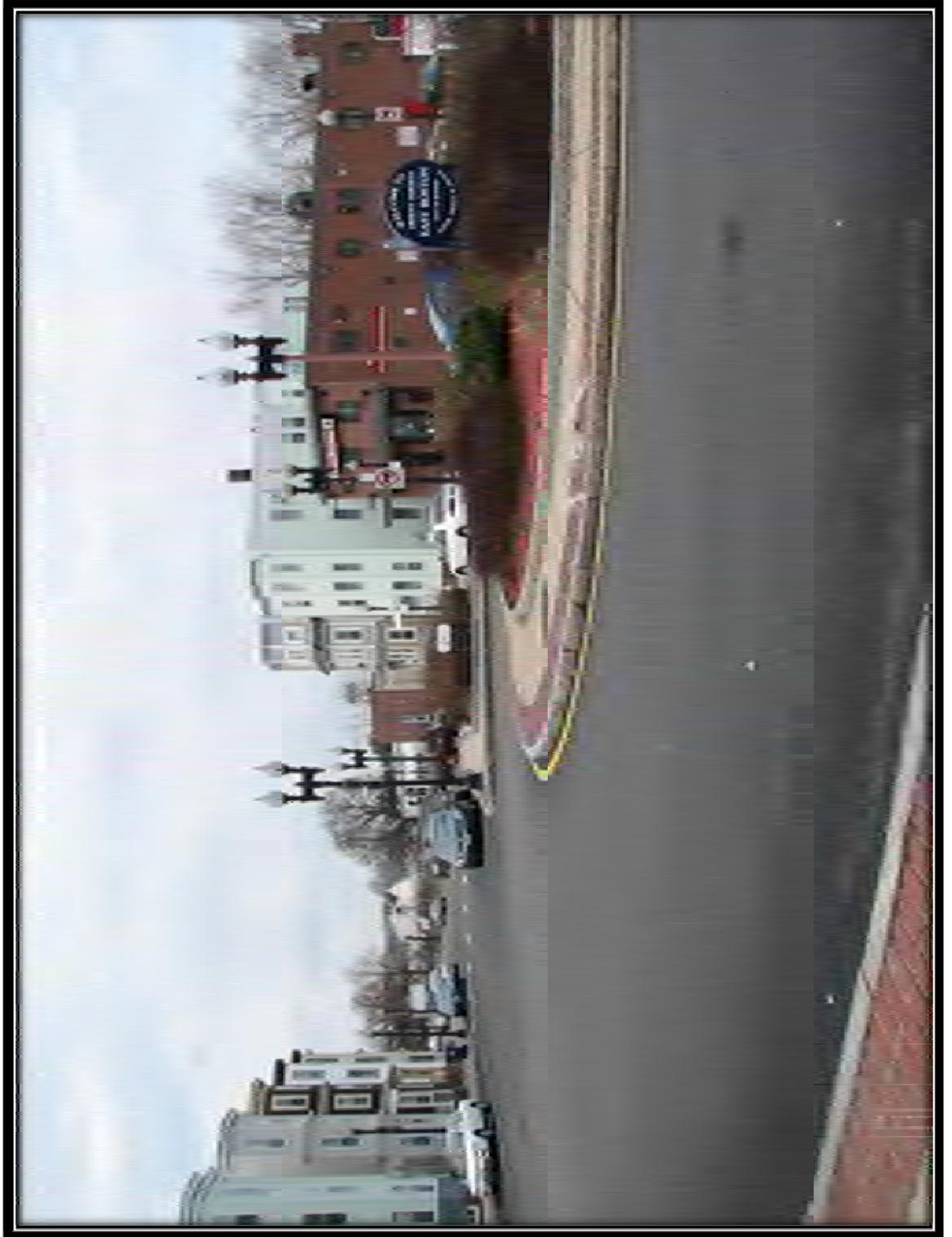


Figure 5.7. Approximate location of engagement at Crooked Creek.

in the evening.” Mill Hill is apparently the knoll described by James Stevens in his account of the battle. Stevens related that his party arrived “within a quarter of a mile of the ferry & then halted & our officers went to look out to place the cannon they went round by the water while they come in sight of the sloop when as soon as the rebels saw our men they fired on them then the firing begun on both sides & fired very warm there come a man & ordered us over a hole into the mouths of the cannon we got on the top of the hill & the grape shot & cannon balls come so thick that we retreated back to the road & then marched down to the ferry (Stevens 1775-1776: 45-46).”

Today, this area is a densely packed urban residential neighborhood. Architectural styles typified by early twentieth century wooden multi-story apartment dwellings, commonly referred to as triple-deckers, public housing, and single family residences. On the edge of the battlefield in this area are two National Register Properties (not associated with this battle). They are the Revere Beach Parkway and the Slades Spice Mill site (Figure 5.8). Portions of the area around Mill Hill are occupied by the Forbes Lithographic Factory Complex (Figure 5.9) which allows no public access through that property at this time.

The location of Provincial and British artillery batteries is conjecture based the primary descriptions and the assumption they were placed on high ground. The Provincial Mill Hill and Mt. Bellingham (Chelsea) as cannon positions are only suggestive and not supported. However, one eye witness account places the initial use of Provincial cannon at the Newgate/Yeamans house. The speculated location of the Newgate/Yeamans house is currently under the Revere Beach Parkway (Figure 5.10). This heavily traveled Olmstead designed road is on the National Register of Historic Places. Given the extent of road construction activities, any site preservation is highly unlikely.

The shoreline along the head of Chelsea Creek was accessed through the railroad right-of-way for the Chelsea shoreline and from Slade’s Tide Mill for the Revere shoreline. Visual inspection of the Chelsea portion revealed numerous modern ceramic (not clay) spheres ranging in size to 100 to 150 in diameter. Due to chemical discoloration and location, they have been commonly thought to be musket and grape shot. However, additional ground-truthing, intensive archeological sampling and geophysical surveys of the shoreline and creek bottom should be considered conclusively identify the firing positions of the opposing forces (which would only be discernible by spent musket shot, grape shot, and cannon balls)

5.6 Winnisimmet Village and Ferry Landing

The area of the 1775 Winnisimmet Ferry Landing lies on the Chelsea (western) side of Chelsea Creek at its confluence with the Mystic River and Boston Harbor. Winnisimmet Village is a prominent location for Provincial forces throughout the battle. HMS *Diana* was subjected to intense small arms fire as she entered and exited Chelsea Creek. In the latter part phases of the battle, Provincial cannon were placed at the ferry landing and brought to bear against the vessel. The grounding and final resting place of HMS *Diana* is described as being at the Winnisimmet Ferry Ways. One eye witness account (citation) places the location of the *Diana* when she was burned on the mud flats as 60 yards off the ferry ways.



Figure 5.8. Slade's Spice (Tidal) Mill.



Figure 5.9. Cul-de-sac at head of Crooked Creek (Forbes Lithograph Complex).



Figure 5.10. Approximate location of Newgate/Yeaman’s House Provincial cannon position.

Today, this section of Chelsea and Chelsea Creek is densely developed. It is a combination of brick residential structures (brownstones), factory buildings, shipyard, and petroleum storage depot (tank farm). The end of the current Winnisimmet Street is the location of the late nineteenth/early twentieth century ferry landing (Figure 5.11). The area is currently a heavily landside industrial site and small shipyard (Figure 5.12). The current seawall is a cut granite structure. Currently, this area does not completely expose at low tide.

Questions remain as to the precise location of the 1775 shoreline, the ferry landing, and the extent of dredging in that vicinity. Additional historical map research, ground-truthing, intensive archeological sampling and geophysical surveys should be undertaken to identify the extent of disturbance as well as locate battle event cultural signatures such as spent musket shot, grape shot, cannon balls, and remains of HMS Diana.

5.7 Chelsea Meetinghouse

The Chelsea Meetinghouse was a key location for Provincial forces throughout the course of the battle. Provincial militia under the command of Nixon and Stark used the Meetinghouse as a staging area. During the morning of May 27th, Nixon and Stark halted their 600 men here for a rest and breakfast before making the crossing to Hog Island. That night, a portion of the command returned to the Meetinghouse with the captured livestock while the remainder prepared to engage the *HMS Diana* from Chelsea Neck. The current structure is listed on the National Register of Historic Places as Church of Christ, originally constructed in 1710. The structure and site has been continually used and heavily modified over the intervening years (Figure 5.13). The structure was turned 90 degrees on its site in 1856. The area has been heavily disturbed including building re-alignment, extensive new, retaining wall, filling and landscaping. These activities have significantly reduced the likelihood of site preservation

5.8 Reported Artifact Finds

There are several reports of artifacts being attributed to this battle (Figure 5.14). These include cannon balls, grape shot, and musket balls (lead shot). As noted above, the lead shot was reported but could not be physically authenticated as musket shot. Similarly, the possible grape shot may be modern ceramic spheres (Figure 5.15). While the cannon balls could date to the period under study, their caliber appears too large for the cannon used in the battle (Figure 5.16).

5.9 Preservation Potential

One of the goals of the project was to identify the preservation potential of the defining features associated with the battle. The preliminary field investigation verified that the majority of the “battlefield”, or study area, has been heavily impacted by development. In some cases, potential archeological sites may remain preserved and accessible under fill, beneath open space areas, or on the bottomlands. Other areas that have been dredged or heavily industrialized may be inaccessible. A more detailed topographic and land use analyses coupled with additional ground-truthing, intensive archeological sampling and geophysical surveys would be necessary to conclusively identify preserved locations containing the defining features of the battle in order



Figure 5.11. View of Ferry Landing down Winnisimmet Street.



Figure 5.12. Approximate location of Ferry Ways and hypothesized site of HMS *Diana*



Figure 5.13. Chelsea Meeting House site today.



Figure 5.14. Ceramic spheres thought to be grape shot from battle.



Figure 5.15. Iron cannon balls reported to be from battle.

to assess their potential for listing of these defining features on the National Register of Historic Places. Within the study area, three core areas (Figure 5.17) were identified for future investigation as they were determined to have the greatest potential for containing remnant archeological features associated with the battle. They include: Crooked Creek (East Boston); Mill Hill/Chelsea Neck (Chelsea and Revere); and Winnisimmet Ferry Ways/HMS *Diana* (Chelsea).

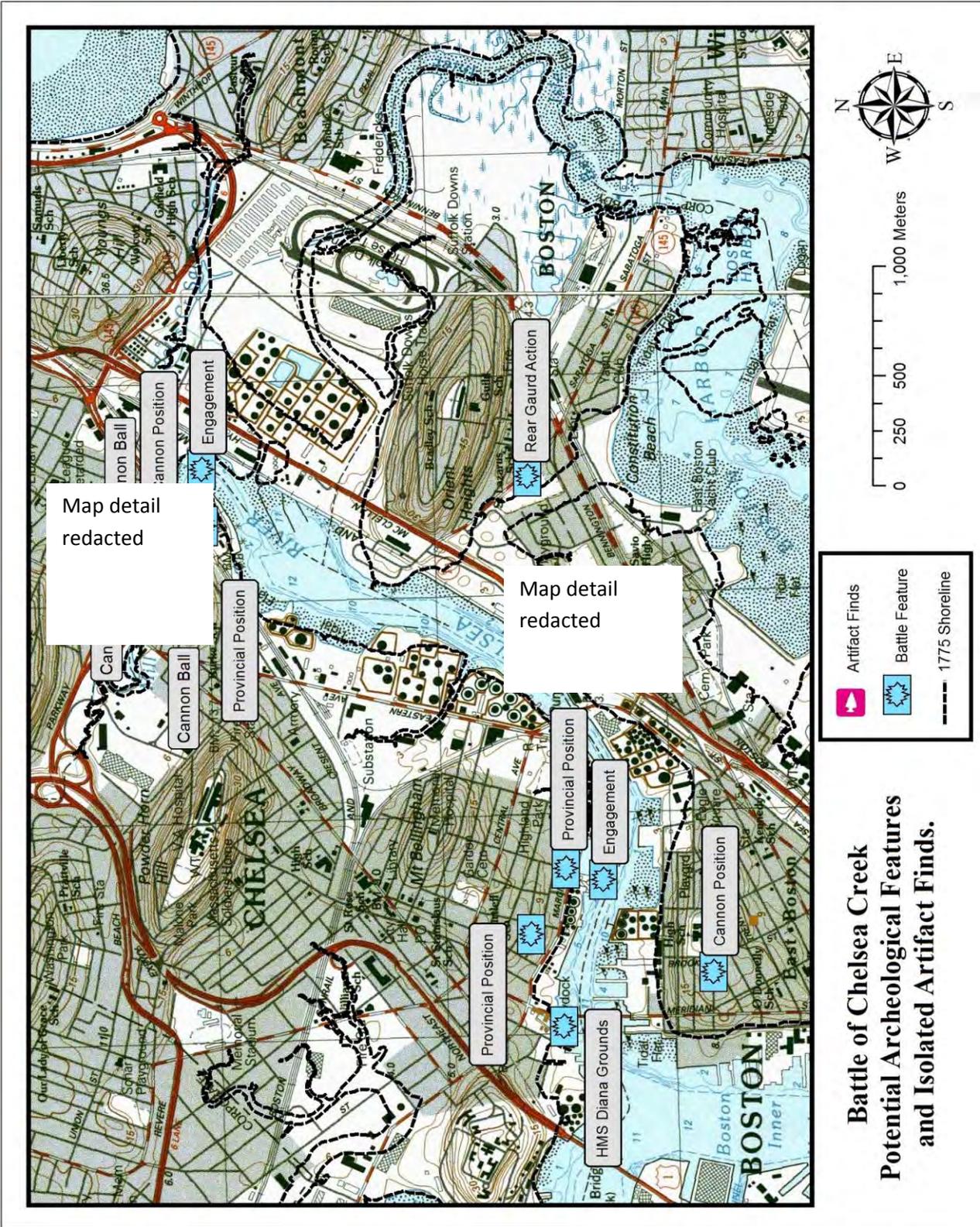


Figure 5.16. Areas most likely to contain physical evidence of the battle.

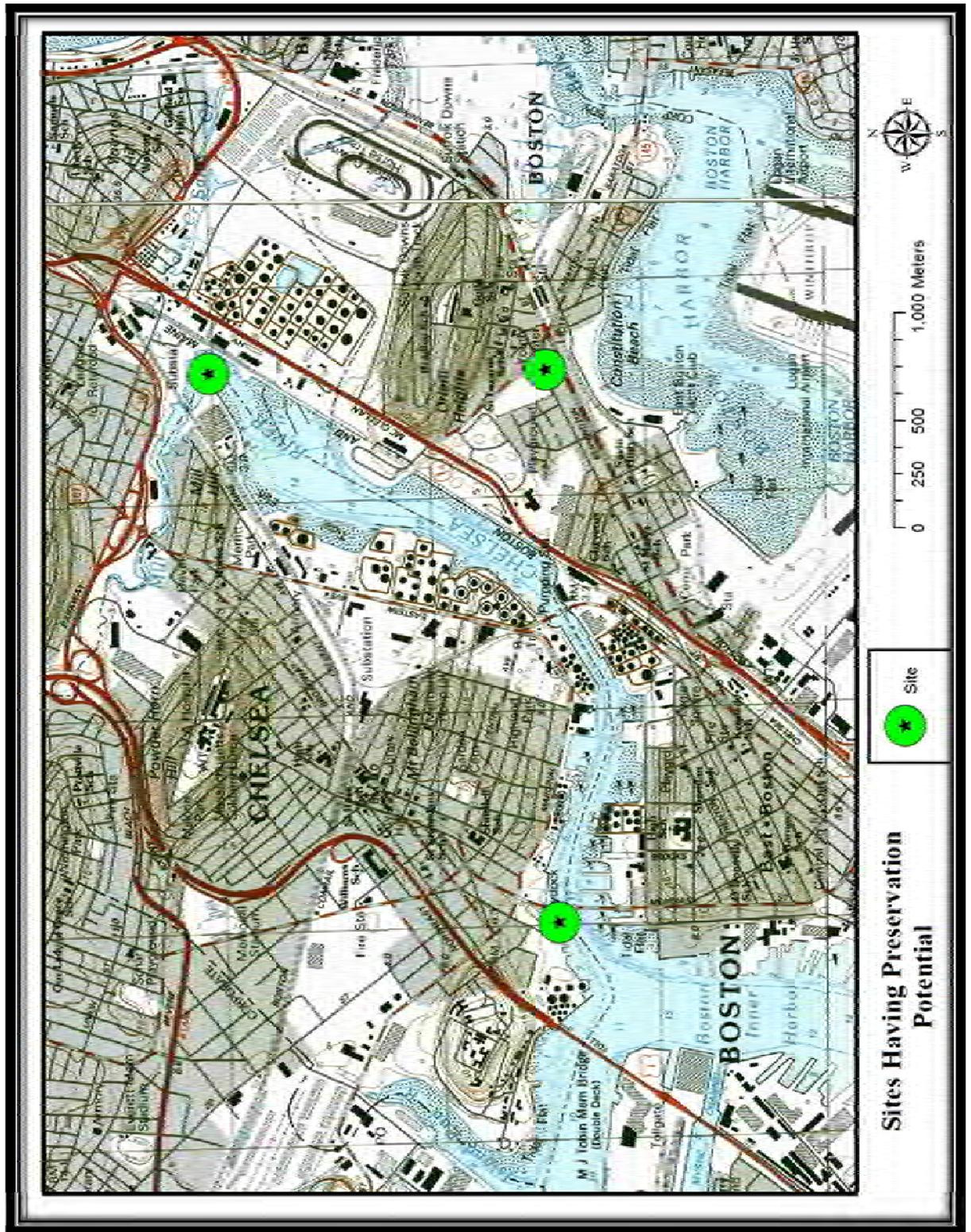


Figure 5.17. Areas most likely to contain physical evidence of the battle.

6. SUMMARY AND RECOMMENDATIONS

The lack of battlefield delineation and identification of its related archeological components is a major threat in itself to the preservation of any battlefield. The absence of reliable location and condition data severely hinders the ability to identify potential adverse impacts from development activities. For the Battle of Chelsea Creek, this was especially true. In addition, ongoing and potential threats from expanded dredging, shore-side redevelopment and new construction can adversely impact now buried and/or undocumented terrestrial components of the battlefield as well as underwater (HMS Diana). These development activities obscure, damage, or destroy the major landscape features of the battlefield, archeological resources associated with the battle, and any attempts to recover the historic landscape and restore the viewshed of the battlefield.

6.1 Summary

6.1.1. Historical Analysis

This study allowed for a long overdue critical re-examination of primary and secondary historical source material relative to the Battle of Chelsea Creek. Document research took place at a large number of local, state, and national repositories both here in the United States and in Great Britain. As anticipated, primary source material from the Provincial side was sparse with barely a handful of accounts providing much of the basis for the historical reconstruction of the battle. In this regard, the accounts written by Farnsworth (1775-1779) and Stevens (1775-1776) proved to be the most useful. British sources were better represented. Ship logs (ADM 51/181; ADM 51/398; ADM 51/720; ADM 51/906; ADM 52/1866) from the vessels involved in the battle and letters written by Vice Admiral Samuel Graves (1775c; 1775d) after the fact provided valuable insights into British movements and tactics. The rediscovery of the original records from the court martial of Lieutenant Thomas Graves (ADM 1/5307) and the payroll records of the *HMS Diana* (ADM 33/364) provided exceptional detail of the vessel's role in the battle and suggests the benefits to be gained from further research undertaken in England.

The primary historical sources described above contained a number of time cues and locational information that initially permitted only a general reconstruction of the battle. The majority of battle participants were not from the local area and the majority of the landmarks they describe are not actually named. However, when these same sources were examined using KOCO A the results were rather rewarding. A case in point is the knoll described by Stevens (1775-1776). The road from Mystic and Malden intersected the road from Winnisimmet Ferry near a number of hills. Several of these hills were eliminated through the application of KOCO A leaving us with only two viable candidates, Mill Hill and Mount Bellingham. KOCO A proved to be a powerful interpretive tool when evaluating the historical record in concert with the reconstructed historical landscape. It provided a richer, more complete history of the Battle of Chelsea Creek and the establishment of study and core areas. Archaeologically, it identified potential areas of artifact concentrations, a necessary first step in evaluating preservation potential.

6.1.2 GIS Analysis

This study has recreated the 1775 landscape and topography of Boston's Inner Harbor and enabled for the mapping and visualization of a complicated set of events taking place in time and space. A high resolution GIS dataset and Citation Data Model (CDM) of the temporal and spatial features associated with the Battle of Chelsea Creek and the 1775 Boston landscape have been developed and archived. Base-level and battlefield maps were produced within the GIS through the integration of multiple data sources including, primary and secondary historical accounts, maps, high resolution orthophotographs, and light detection and ranging (LIDAR) data. The geodatabase will aid in the development of long-range management strategies and facilitate the assessment of threats posed by anthropogenic activities and environmental change. It also provides a baseline to guide future research and aid in the assessment of present and future threats posed by further landscape modifications and environmental change.

This relatively little known and researched event provided a unique and new opportunity to apply GIS technologies. In conjunction with traditional historical research, GIS methodologies have enabled for the completion and success of the most comprehensive and detailed interdisciplinary research study ever undertaken in regard to the Battle of Chelsea Creek. Its application has provided a clearer understanding of how the physical landscape influenced the Battle of Chelsea Creek and has provided valuable insights into battlefield events and preservation.

6.1.3 KOCOA Analysis

A KOCOA assessment was carried out and defining features have been identified and mapped. In addition, time series maps were created to visualize key battle events. Each component of the KOCOA analysis illustrates features of the battlefield. Critical defining features are those that were significant to the outcome of the battle. Certain less obvious environmental conditions such as tides and winds are factors to be considered as they can have an effect upon KOCOA components.

The lack of local knowledge and precision in the documentary record made it difficult to identify the defining features on the actual battlefield. By subjecting the battle narrative to a KOCOA analysis we were able to reasonably identify the location of key features on our geo-referenced reconstructed 1775 landscape. The KOCOA analysis and defining features are crucial laying out the boundaries of the battlefield, defining areas of archeological potential, and identifying management strategies.

6.1.4 Field Investigation

For the purposes of this study, field investigation was limited to visual inspection of the entire study area by windshield and walkover survey (where possible). Using the geo-referenced 1775 landscape, we were able to derive relatively accurate locations for the KOCOA-derived defining features of the battle. The locations for each distinctive feature and battlefield event were then depicted through Google Earth.

Six core areas within the battlefield study area were visually inspected: Williams Wharf and Mansion; West Head of Noddles Island; Crooked Creek; Mill Hill/Chelsea Neck; Winnisimmet Ferry Landing; and Chelsea Meeting House. Many of these areas exhibit a high level of disturbance and extensive development since 1775. However, three core areas were identified as having potential for site preservation and more intensive investigation: Crooked Creek engagement area; Mill Hill/Chelsea Neck engagement area; and Winnisimmet Ferry Landing with HMS *Diana* grounding site.

6.2 Proposed Battlefield Boundaries

A main task of this study was to determine the boundaries of the battlefield for the Battle of Chelsea Creek. This was a problematic task. Much of the contemporary historical narrative had limited value as landmarks were only generally described by the writers who were not familiar with the locale. Garnering such information from nineteenth and early twentieth century writers proved equally elusive. Even when locations were named, the precise location was vague and debatable, or the feature (e.g., structure) no longer existed. Further, there were no prior archeological investigations to further inform us of key features.

To fix the battlefield boundaries, we relied on the reconstruction of the 1775 landscape and the KOCOA analysis of the battle events. As noted in Section 2, we were able to accurately relocate major landscape features such as shore lines, wetlands, and roads. Filtering the battle narrative through the KOCOA lense (Section 4) and by tying it to the location of these historic features, we were able to define the physical limits of battle events and related movements.

Much of our proposed boundaries for the Battle of Chelsea Creek follow the 1775 transportation network for that area (Figure 6.1):

The southern-most land boundary includes the terminus of Chelsea Street at Border Street and the current location of Maverick Subway Station. This is roughly the location of Williams Wharf. The seaward extent is to capture the proximate locations for *HMS Preston*, *HMS Glasgow*, and *HMS Britannia* at the commencement of action.

The eastern boundary follows the general route of British troop land advance on Noddles Island and Provincial route of withdrawal with livestock into Belle Isle Marsh. Today, this route is roughly from Maverick Subway Station north along Chelsea Street to Saratoga Street, and then along Saratoga Street to its intersection with Boardman Street. This is the approximate location of the Crooked Creek engagement. The route across Belle Isle Marsh varied, but likely followed Saratoga Street toward Winthrop and onto Main and Revere Streets in Winthrop (likely the old Beach Road).

The western boundary runs along on the western side of the entire length of Broadway in Chelsea north to Beach Street in Revere. This route used by Provincial troops from the Newgate/Yeamans House to Winnisimmet Landing.

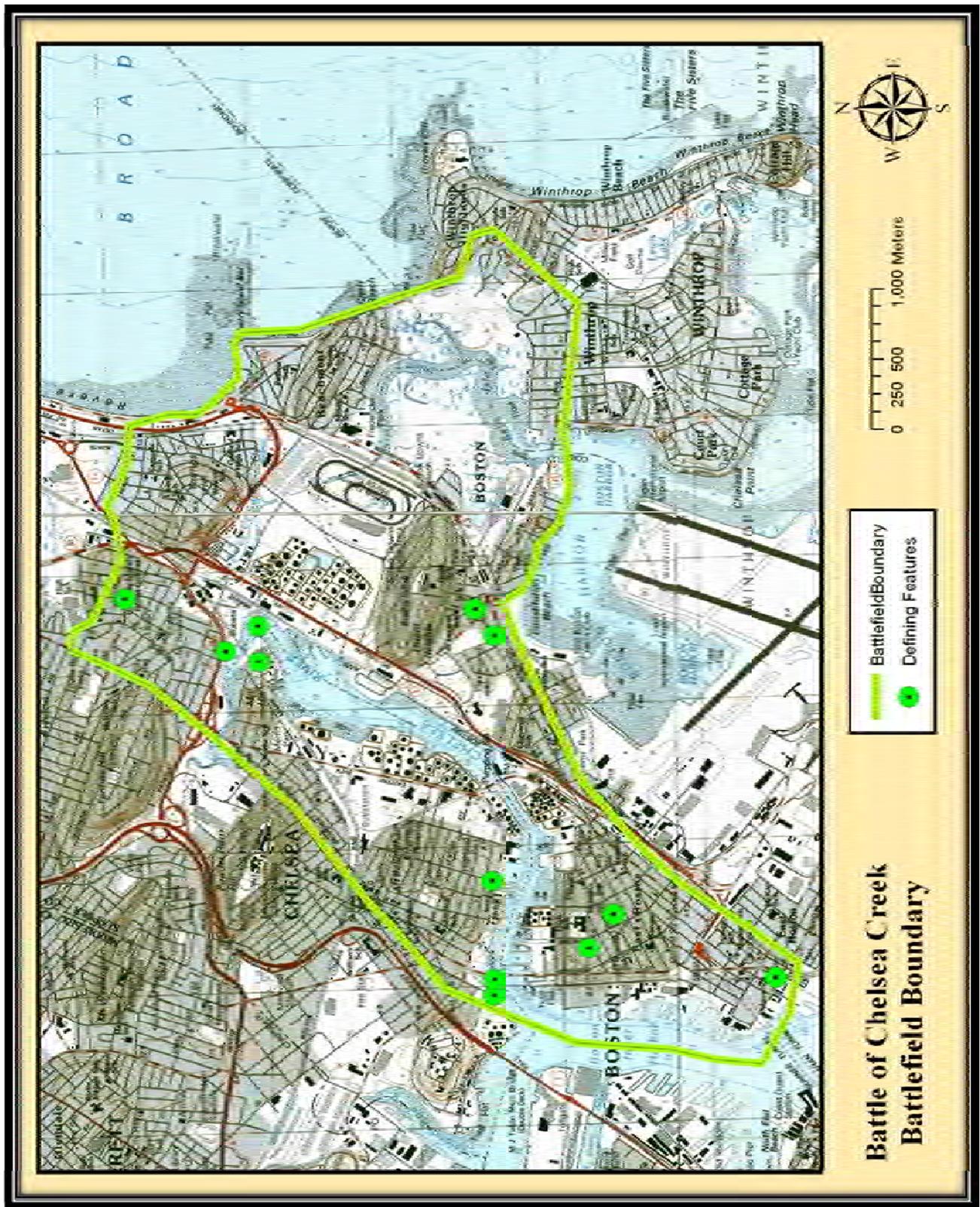


Figure 6.1. Battlefield boundary shown with green line. Boundaries were delineated based on the defining features of the battle.

The northern boundary specifically includes the Chelsea Meeting House and coincides closely with the east/west paths leading to the Chelsea Meeting House, north of Sales Creek.

Areas specifically excluded from the proposed boundaries were the initial line of march for Provincial forces from Medford to Chelsea Meeting House. The movement of troops off the routes of march cannot be reliably discerned.

6.3 Potential National Register of Historic Places

While KOCOA proved to be a useful tool in establishing battlefield boundaries and locating key terrain features integral to the battle on the modern landscape, preliminary field investigation of those features provided insufficient physical evidence in order to prepare NR nominations at this time. Field investigation verified that the majority of the “battlefield” has been heavily impacted by urban development. In some cases, potential archeological sites may remain preserved and accessible under fill, beneath open space areas, or on the bottomlands. In all cases, the integrity of the site has been compromised. The degree to which development has impacted site integrity or the potential for rehabilitation of certain locations can be assessed through further testing.

6.4 Recommendations

One of the goals of the project was to identify the preservation potential of the defining features associated with the battle. The majority of the “battlefield” within the study area has been heavily impacted by development. We have identified a narrow region where cultural resources may be preserved either on the active harbor floor or under several meters of fill. In some cases, potential archeological sites may remain preserved and accessible under fill and or beneath open space areas. Other areas that have been dredged or heavily industrialized may be inaccessible. A more detailed topographic and land use analyses coupled with ground-truthing, archeological and geophysical surveys would be necessary to conclusively identify preserved locations containing the defining features of the battle.

The preliminary field investigation verified that the majority of the “battlefield” has been heavily impacted by development. In some cases, potential archeological sites may remain preserved and accessible under fill, beneath open space areas, or on the bottomlands. Other areas that have been dredged or heavily industrialized may be inaccessible.

This study has identified with the greatest potential for containing remnant archeological features associated with the battle include: Crooked Creek (East Boston); Mill Hill/Chelsea Neck (Chelsea and Revere); and Winnisimmet Ferry Ways/HMS *Diana* (Chelsea) (Figure 6.2). A more detailed topographic and land use analyses coupled with additional ground-truthing, intensive archeological sampling and geophysical surveys within core areas would be necessary to conclusively identify preserved locations containing the defining features of the battle.

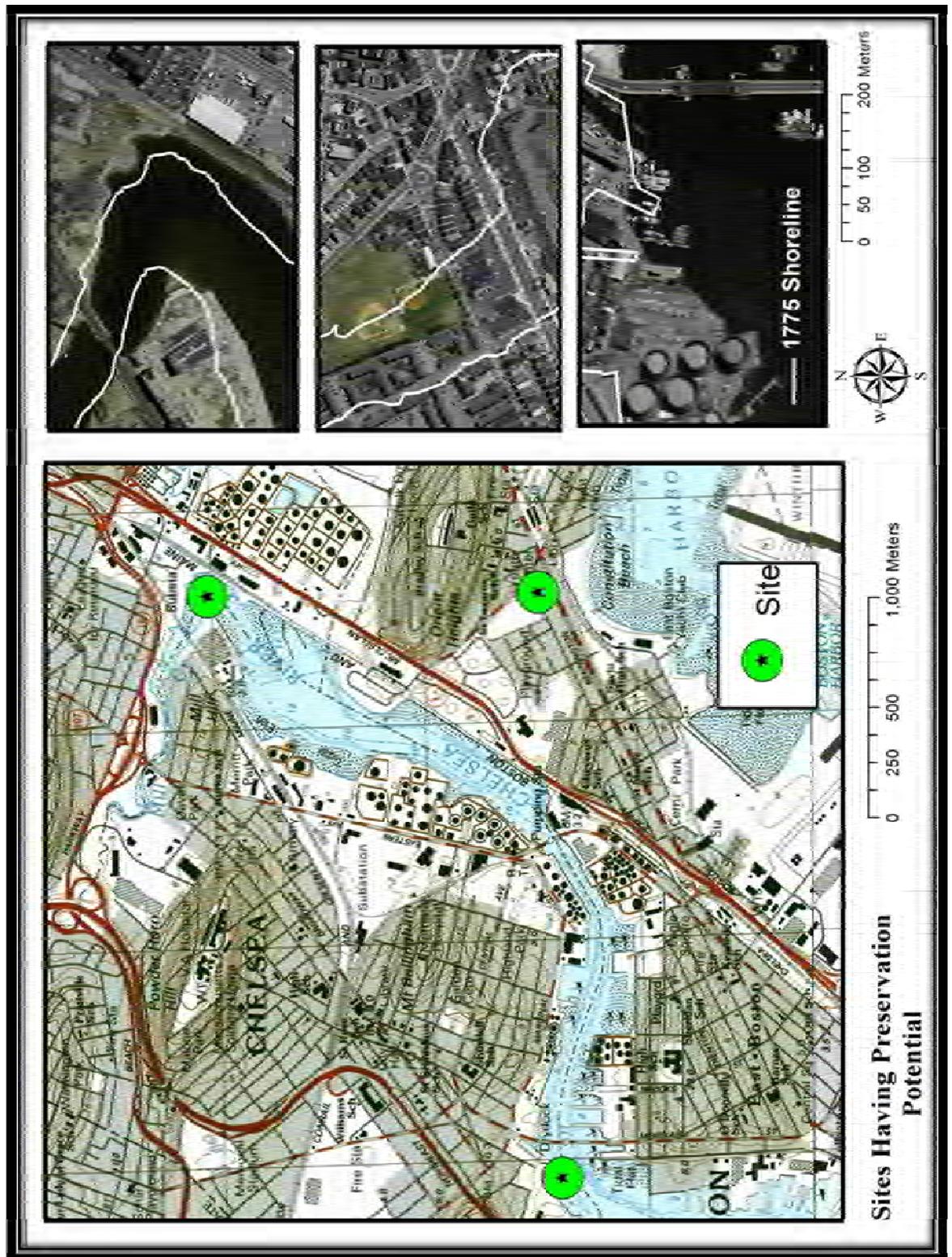


Figure 6.2. USGS topographic map showing the three sites having preservation potential. Each site is magnified and depicted with the 2008 orthophotograph. Historic shoreline in the magnified images is shown with white orthophotograph. Historic shoreline in the magnified images is shown with white line.

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APPENDIX 1:
Primary Accounts Related To The Battle of Chelsea Creek

compiled and edited by

Craig J. Brown
University of Massachusetts Boston

The following section contains transcriptions of primary documents written by government officials, officers, soldiers, and civilians that relate to the events surrounding the Battle of Chelsea Creek. Accompanying each entry are bibliographic citations where researchers may find copies of the documents. The entries contain excerpts designed to highlight those details crucial to an understanding of the Battle of Chelsea Creek in its proper historical context as a part of the Siege of Boston. Excess material not bearing on the battle or its historical context has been discarded. Quotations are taken directly from primary sources, original spelling and punctuation is retained. This is done in the belief that the authors of the documents are the best ones to chronicle the events under consideration. Corrections, clarifications, and interpretations are offered only when necessary and are contained in footnotes. The entries are arranged topically and then chronologically.

1. Provincial Forces at the Battle of Chelsea Creek May 27-28, 1775 (1460 men)

1.1. Chelsea Company at May 27-28, 1775 Battle (Captain Samuel Sprague) (58 men)¹³

Saml, Sprague, Chelsea, Captain	John Holden, Reading, private
Joseph Cheever, Chelsea, 1 Lieutenant	James Hill, Reading, private
William Oliver, Chelsea, 2 Lieutenant	John Hayward, Salem, private
Abijah Hastings, Chelsea, Sergeant	Peter Hines, Marblehead, private
Wm. Johnson (Reading) Sergeant	Elkazer Jackson, Boston, private
Timothy Brient, (Reading) Sergeant	Thomas Low, Boston, private
Hezekiah King, Chelsea, Seargeant	Daws Lambert, Reading, private
William Oliver, Chelsea, Corporal	Sam. Linds, Malden, private
John Pratt, Chelsea, Corporal	Eleazer Newel, Boston, private
Thomas Cheever, Chelsea, Corporal	Ezra Pratt, Lynn, private

¹³ The majority of this company served from 4 May, 1775, and was in the levies enlisted for eight months service in Colonel Gerrish's Regiment, which became Colonel Baldwin's Regiment.

Joseph Green, Chelsea, Corporal	Thomas Pratt, Chelsea, private
Naphtili Newell, Boston, drummer	Sam. Hutton Pratt, Chelsea, private
James Brient, Reading, private	Thomas Rankins, Boston, private
Henry Blake, Chelsea, private	John Robbins, Chelsea, private
Jacob Baker, Chelsea, private	Nathaniel Ridgway, Boston, private
Jack Brient, Stoneham, private	Thomas Ridgway, Boston, private
Nathan Cheever, Chelsea, private	Solomon Shutz, Chelsea, private
Joshua Cummins, Chelsea, private	William Samson, Gloster, private
Evens Davis, Charlestown, private	Alexander Shirley, Chelsea, private
Jonas Dixon, Chelsea, private	Alexander Shirley Jr, Chester, priv.
Jonathan Eaton, Reading, private	James Shirley, Chester, private
David McElery, Salem, private	John Shirley, Chester, private
John Goodin, Chelsea, private	John Tuttle, Lynn, private
Pomp. Green, Stoneham, private	Thomas Tuttle, Lynn, private
Cato Green, Stoneham, private	Edward Waite, Chelsea, private
Jack Green, Reading, private	Spenser Williams, Reading, private
Sam. Felch, Reading, private	Reuben Wesson, Reading, private
Sam'l Hazeltine, Chelsea, private	Nathan Walton, Reading, private
Nath'l Henderson, Chelsea, private	Oliver, Walton, Reading, private

(Bossom, Albert D. 1900. "The Battle of Chelsea." In *Register of Old Suffolk Chapter Sons of the American Revolution*. Boston: Press of Wallace Spooner, 57.)

1.2. The Scouting Party of May 26, 1775 (Colonel Gerrish's Regiment) (54 men)

Detail of the Scouting Party for the 26th of May, 1775

Richard Dodge, 1 corporal and six men	7
Captain Rogers, 1 Commander, four privates	5
Captain Gerrish's, one sergeant and four	5
Captain Cogswell's privates	6
Captain Warner and four	5
Captain A. Dodge	4

To parade opposite the College Chappel at ¼ past 6 precisely. Mr. Emmans guard 27 of Capt. A. Dodge's men (1 Lt., a Sgt. and 24 men) of Capt. Warner's 1 Lt., 1 Sgt., 1 Corp., 24 privates.

Tristram Zebiger,

Adjt.

Camp Cambridge, 26 May.

(Bossom, Albert D. 1900. "The Battle of Chelsea." In *Register of Old Suffolk Chapter Sons of the American Revolution*. Boston: Press of Wallace Spooner, 51.)

1.3. Colonel John Nixon's and Colonel John Stark's Detachment (Approx. 620 men)¹⁴

1.3.1. Colonel John Nixon's Massachusetts Regiment (Approximately 290 men)¹⁵

Staff Officers

Colonel John Nixon (Sudbury, MA)
Lieutenant Colonel Thomas Nixon (Framingham, MA)
Major John Buttrick (Concord, MA)
Adjutant Abel Holden (Sudbury, MA)
Quartermaster John White (Haverhill, MA)
Surgeon Isaac Spafford (Haverhill, MA)
Surgeon's Mate Josiah Langdon (Sudbury, MA)

Line Companies

Captain William Smith's Company (Lincoln, MA)
Captain John Hayword (Acton, MA)
Captain Joseph Butler (Concord, MA)
Captain Abisha Brown (Concord, MA)
Captain Micajah Gleason (Framingham, MA)
Captain Moses McFarland (Haverhill, MA)
Captain David Moore (Sudbury, MA)

(Muster Rolls of the Revolutionary War, 1767-1833, SC1-57X, Massachusetts State Archives; Secretary of the Commonwealth. 1896-1899. *Massachusetts Soldiers And Sailors Of The Revolutionary War*. 17 Vols. Boston: Wright & Potter Printing Co; Gardner, Frank A. 1914. Colonel John Nixon's Regiment. *The Massachusetts Magazine* 7(3): 99-123.)

1.3.2. Cpl. Amos Farnsworth Detail (Farwell's Co, Col. Wm. Prescott's Reg) (12 men)¹⁶

(Farnsworth, Amos. 1775-1779. "Diary Kept By Lieut. Amos Farnsworth Of Groton, Mass., During Part Of The Revolutionary War, April 1775-May 1779." Edited by Samuel A. Green. In *Proceedings of the Massachusetts Historical Society* Vol. 32 1897-1899: 74-107; Secretary of the Commonwealth. 1896-1899. *Massachusetts Soldiers And Sailors Of The Revolutionary War*. 17 Vols. Boston:

¹⁴ This detachment was the one ordered to remove the livestock off of Noddle's Island and Hog. It was made up of the able bodied and properly equipped men of Nixon's Regiment and Stark's Regiment augmented by small detachments from at least one other regiment under Colonel William Prescott.

¹⁵ Four companies mutinied on the morning of May 26, 1775: Captain Benjamin Bullard (Sherborne, MA); Captain Thomas Drury (Framingham, MA); Captain John Leland; Captain Thadeus Russell (Sudbury, MA). Captain Drury's Company returned to the regiment and stayed throughout the year. The other companies joined other regiments. This mutiny probably made the addition of small detachments drawn from other regiments necessary.

¹⁶ Corporal Amos Farnsworth and a detail of 10 or 11 men were detached from Captain Henry Farwell's Company of Colonel William Prescott's Regiment to reinforce Nixon. Farnsworth's account is the only Provincial account of the action on Noddle's Island. This detail was made up of men from Groton and Townsend. One man was wounded.

Wright & Potter Printing Co; Gardner, Frank A. 1908. Colonel William Prescott's Regiment. *The Massachusetts Magazine* 1(3): 149-167, 1(4): 235-259.)

1.3.3. Major Thomas Poor Detail (Colonel James Frye's Regiment) (17 men)¹⁷

(Secretary of the Commonwealth. 1896-1899. *Massachusetts Soldiers And Sailors Of The Revolutionary War*. 17 Vols. Boston: Wright & Potter Printing Co; Gardner, Frank A. 1910. Colonel James Frye's Regiment. *The Massachusetts Magazine* 3(3): 187-198, 3(4): 246-256.)

1.3.4. Colonel John Stark's New Hampshire Regiment (Approximately 300 men)¹⁸

Staff Officers

Colonel John Stark

Lieutenant Colonel Isaac Wyman (Derryfield/ Manchester, NH)

Major Andrew McClary (Epsom, NH)

Adjutant Abiel Chandler

Quartermaster John Caldwell

Quartermaster Henry Parkinson

Chaplain David Osgood

Surgeon Obadiah Williams

Surgeon's Mate Calvin Frink

Surgeon's Mate Josiah Chase

Line Companies

Captain Isaac Baldwin (Hillsborough, NH)¹⁹

Captain George Reid (Londonderry, NH)

Captain Elisha Woodbury (Salem, NH)

Captain Samuel Richards (Goffstown, NH)

Captain John Moore (Derryfield/ Manchester, NH)

Captain Joshua Abbot (Concord, NH)

Captain Gordon Hutchins (Concord, NH)

Captain Aaron Kinsman (Concord, NH)

Captain Henry Dearborn (Nottingham, NH)

Captain Daniel Moore (Deerfield, NH)

¹⁷ Major Thomas Poor received his promotion on May 26, 1775. It is doubtful that someone took over his company prior to marching for Chelsea that night. His detail included Sergeant Chickering and Sergeant Johnson with 14 men drawn largely from Andover.

¹⁸ John Stark received a commission as Colonel from Massachusetts on April 26, 1775 "until New Hampshire could act (Kidder 1868: 2; La Bree 2007: 55)." New Hampshire did not issue Stark a commission until June 3, 1775 (New Hampshire Historical Society). Officially, Stark and his men were operating under the auspices of Massachusetts at the Battle of Chelsea Creek.

¹⁹ Captain Isaac Baldwin is credited with being one of the 12 man detail that burned the HMS Diana (Frothingham 1849; Sumner 1858; Chamberlain 1908). McKay disputes this (McKay 1925).

(Hammond, Isaac W, Editor. 1885. *Rolls Of The Soldiers In The Revolutionary War 1775, To May 1777*. Vol. 14 New Hampshire State Papers. Concord: Parsons B. Cogswell, State Printer.)

1.4 Gen. Israel Putnam's and Dr. Joseph Warren's Reinforcement (Approx. 330 men)

- 1.4.1. General Israel Putnam (Connecticut)²⁰
- 1.4.2. Dr. Joseph Warren (President of Massachusetts Provincial Congress)²¹
- 1.4.3. Colonel James Frye's Massachusetts Regiment (Approx. 300 men)

Staff Officers

Colonel James Frye (Andover, MA)
Lieutenant Colonel James Brickett (Haverhill, MA)
Major Thomas Poor (Andover, MA)
Adjutant Daniel Hardy (Bradford, MA)
Quartermaster Benjamin Foster (Boxford, MA)
Surgeon Thomas Kittridge (Andover, MA)

Line Companies

Major (Captain) Thomas Poor (Andover, MA)
Captain Benjamin Ames (Andover, MA)
Captain John Davis (Methuen, MA)
Captain William Perley (Pearley) (Boxford, MA)
Captain Nathaniel Gage (Bradford, MA)
Captain James Sawyer (Haverhill, MA)
Captain Jonathan Evans (Salisbury, MA)
Captain John Currier (Amesbury, MA)
Captain Jonas Richardson (Woburn, MA)
Captain William Hudson Ballard (Amesbury, MA)

(Stevens, James. 1775-1776. "The Revolutionary Journal Of James Stevens Of Andover, Mass." In *The Essex Institute Historical Collections* Vol. 48 January 1912: 41-71; Secretary of the Commonwealth. 1896-1899. *Massachusetts Soldiers And Sailors Of The Revolutionary War*. 17 Vols. Boston: Wright & Potter Printing Co; Gardner, Frank A. 1910. Colonel James Frye's Regiment. *The Massachusetts Magazine* 3(3): 187-198, 3(4): 246-256.)

- 1.4.4. Capt. Thomas Waite Foster (Col. Richard Gridley's Reg.) (Approx. 30 men)
Two – 3 pounder field artillery pieces (2.90 caliber, max. range 1400 yards)²²

²⁰ There can be little doubt that Putnam and perhaps Warren accompanied this reinforcement (Sumner 1858; Lamb 1908; McKay 1925; Tentindo and Jones 1978; Healey 2005).

²¹ *Ibid.*

²² For a basic discussion of Revolutionary War artillery see: Nardo, Don. 2003. *The American Revolution Weapons Of War* Farmington Hills: Lucent Books: 63-78.

1.5. Colonel Ephraim Doolittle's Relief Detachment (Approx. 400 men)²³

1.5.1. Colonel Ephraim Doolittle's Massachusetts Regiment

Staff Officers

Colonel Ephraim Doolittle (Petersham, MA)
Lieutenant Colonel Benjamin Holden (Roxbury, MA)
Major Willard Moore (Paxton, MA)
Adjutant Oliver Holman
Adjutant John Woodward
Quartermaster Benjamin Haywood
Surgeon Barnit Wait
Surgeon's Mate Enoch Dole (Lancaster, MA)

Line Companies

Captain Abel Wilder (Winchendon, MA)
Captain Adam Wheeler (Hubbardston, MA)
Captain Joel Fletcher (Templeton, MA)
Captain Eben Millet (Holden, MA)
Captain Ichabod Dexter (Athol, MA)
Captain Jonathan Holman (Templeton, MA)
Captain Robert Oliver (Conway, MA)
Captain John Woods
Captain Abijah Moore (Putney, MA)
Captain Hezekiah Stowell
Captain John Jones (Princeton, MA)
Captain Oliver Capron (Richmond, MA)

(Secretary of the Commonwealth. 1896-1899. *Massachusetts Soldiers And Sailors Of The Revolutionary War*. 17 Vols. Boston: Wright & Potter Printing Co; Gardner, Frank A. 1909. Colonel Ephraim Doolittle's Regiment. *The Massachusetts Magazine* 2(1): 11-29.)

²³ Doolittle's relief detachment was sent by General Artemas Ward to relieve the Nixon-Stark Detachment that marched on the night of May 26, 1775. They arrived during the afternoon of May 28, missing the battle itself. They likely came under artillery fire from the British artillery position on Noddle's Island. They played an active role in the subsequent actions on Noddle's (Henshaw 1775; Stevens 1775-1776).

2. **Royal Naval Forces at the Battle of Chelsea Creek May 27-28, 1775 (1626 Men)**

2.1. **Vice Admiral Samuel Graves (Approx. 1310 Men; 186 Marines)**

- 2.1.1. HMS Preston (Flagship) (4th Rate) Captain John Robinson, Commanding
Dim. 143ft 3in, 115ft 4in, 41ft 3in, 17ft 3in; 1043 Tons; Draught 9ft 10in/15ft 6in
Deptford; 50 Guns (22x24lbs; 22x12lbs; 6x6lbs); 300 Men; 40 Marines.²⁴
- 2.1.2. HMS Somerset (3rd Rate) Captain Edward LeCras, Commanding
Dim. 160ft, 131ft 4in, 45ft, 19ft 4in; 1435 Tons; Draught Unknown
Chatham; 68 Guns (26x32lbs; 28x18lbs; 14x9lbs); 520 Men; 77 Marines.²⁵
- 2.1.3. HMS Cerberus (6th Rate Coventry Class) Captain James Chads, Commanding
Dim. 118ft 7 1/2in, 97ft 2in, 33ft 10 1/2in, 10ft 6in; 593 Tons; Draught Unknown
Portsmouth; 28 Guns (24x9lbs; 4x3lbs) 12 Swivels (12x1/2lb); 200 Men; 23
Marines.²⁶
- 2.1.4. HMS Glasgow (6th Rate Seaford Class) Captain William Maltby, Commanding
Dim. 109ft 4in, 91ft 2 1/2in, 30ft 6in, 9ft 7 1/2in; 451 Tons; Draught Unknown
Unknown; 20 Guns (20x9lbs); 130 Men; 23 Marines.²⁷
- 2.1.5. HMS Mercury (6th Rate Gibraltar Class) Captain John Macartney, Commanding
Dim. 107ft 8in, 88ft 6in, 30ft 4in, 9ft 8in; 433 Tons; Draught 6ft 9in/a3ft 3in
Sheerness; 20 Guns (20x9lbs); 130 Men; 23 Marines.
- 2.1.6. HMS Diana (Schooner) Lieutenant Thomas Graves, Commanding
Dim. Unknown; 120 Tons; Draught Unknown
Purchased in North America; 4-6 Guns (4lbs) 12 Swivels (12x1/2lb); 30 Men.
- 2.1.7. HMS Britannia (Sloop Tender) 25 Tons; Purchased in North American;
Details Unknown.
- 2.1.8. 10-12 Longboats and Pinnaces belonging to the above vessels each mounted
a 1/2lb Swivel.

²⁴ The description of each ship, where available is given as follows: Ship Name; Class; Commander; Dimensions (length of gundeck, length of keel x breadth x depth of hold); Tonnage, Draught (forward/aft); Dockyard Where Built; Number of Guns (Type); Crew; Marine Compliment.

²⁵ The HMS Somerset had two marines wounded in the action at Crooked Creek. Two sailors who were in the longboat, George Williams and William Crocker were killed near Winnisimmet Ferry (Somerset Log).

²⁶ The HMS Cerberus landed two of her 3 lbs quarterdeck guns on Noddle's Island at 5 pm, May 27 (Cerberus Log).

²⁷ The HMS Glasgow reported having one man wounded from the pinnace in the action at Winnisimmet Ferry (Glasgow Log).

(Clark, William Bell, Editor. 1964. *Naval Documents Of The American Revolution*. Vol. 1. Washington, D.C.: U. S. Government Printing Office; Winfield, Rif. 2007. *British Warships in the Age of Sail 1714-1792: Design, Construction, Careers and Fates*. Barnsley, S. Yorkshire: Seaforth Publishing.)

2.2. General Thomas Gage Reinforcement (Approx. 30 Men; 130 Marines)

2.2.1. First Marine Battalion Detachment (100 Marines)

2.2.2 Two – 12 lb field artillery pieces (4.62 caliber, max. range 3200 yards) (30 Men)

(Barker, Lieutenant John.1774-1776. *The British In Boston Being The Diary Of Lieutenant John Barker Of The King's Own Regiment From November 15, 1774 To May 31, 1776*. Annotated by Elizabeth Ellery Dana 1924 Cambridge: Harvard University Press.)

3. Crew of the HMS Diana at the Battle of Chelsea Creek May 27-28, 1775

Lieutenant Thomas Graves, Commander

Sailing Master John Dawson

Boat Mate ----- Lenox

Carpenter's Mate ----- Markey

Gunner's Mate ----- Thomas

Midshipman Dashwood Bacon

Surgeon's Mate ----- Birtwhistle

Clerk ----- Mason

Pilot Mathew Murray

Seaman ----- Chance

Seaman ----- Johnson

Seaman ----- McInhenry

Seaman ----- Howell

Seaman ----- Brown

Seaman ----- Humphries

Seaman ----- Donaldson

Seaman ----- Earhim

Seaman ----- ---rand

Seaman ----- McGowan

Seaman William Carty

Seaman ----- Atkins

Seaman ----- Fletcher

Seaman Thomas Marsh

Seaman -----sar Salter

Seaman ----- Dublin

Seaman -----er Houtres

Seaman Jacob Bowden

Seaman ----- Smalley

Seaman -----h Searles

Seaman ----- Man

(The National Archives of England. ADM 33/634 Ships' Pay Books (Series 1) (1669-1778) Kew, England; The National Archives of England. ADM 1/5307 Court Martial Papers (1775-1776) Court Martial of Lieutenant Thomas Graves, in relation to the loss of the HMS Diana held on 6th June 1775.)

4. Resolves of the Massachusetts Committee of Safety and Provincial Congress

MASSACHUSETTS COMMITTEE OF SAFETY

April 24, 1775

Resolved, That General *Ward* be desired immediately to direct all the Field-Officers of the Regiments of Minute-Men, now in *Cambridge*, to attend the Committee of Safety at their chamber, at Mr. *Steward Hasting's* House.

Resolved, That the inhabitants of *Chelsea* and *Malden* be, and hereby are absolutely forbidden to fire upon, or otherwise injure any Seamen belonging to the Navy, under the command of Admiral *Graves*, unless fired upon by them, until the said inhabitants of *Chelsea* and *Malden* receive orders from this Committee, or the General of the Provincial Forces, to do so.

April 26, 1775

On the twenty-fourth of April it was resolved that the inhabitants of *Chelsea* and *Malden* be, and hereby are absolutely forbidden to fire upon or otherwise injure any Seamen belonging to the Navy, under the command of Admiral *Graves*, unless fired upon by them, until the said inhabitants of *Chelsea* and *Malden* receive orders from this Committee, or the General of the Provincial Forces, so to do:

Resolved, That the Resolve of the twenty-fourth instant, respecting the inhabitants of *Chelsea* and *Malden*, be reconsidered, and ordered that it be immediately remanded; also,

Resolved, That the inhabitants of *Chelsea* and *Malden* be hereby desired to put themselves in the best state of defence, and exert the same in such manner, as, under their circumstances, their judgments may direct.

(St. Clair Clarke, M. and Peter Force. 1837. *American Archives: Fourth Series, Containing A Documentary History Of The English Colonies In North America, From The King's Message To Parliament, Of March 4, 1744, To The Declaration Of Independence By The United States.* Series 4 Vol. 2. Washington, 745-746.)

MASSACHUSETTS COMMITTEE OF SAFETY

May 3, 1775

Voted, That two Companies be raised in the Towns of *Malden* and *Chelsea*, for the defence of the sea-coast of said Towns, the said Companies to be joined to such Regiments in future as they may be ordered to, should there be occasion, or discharged from service as soon as the publick good will admit of it.

(St. Clair Clarke, M. and Peter Force. 1837. *American Archives: Fourth Series, Containing A Documentary History Of The English Colonies In North America, From The King's Message To Parliament, Of March 4, 1744, To The Declaration Of Independence By The United States.* Series 4 Vol. 2. Washington, 751.)

MASSACHUSETTS COMMITTEE OF SAFETY

May 7, 1775

Ordered, That the Selectmen and the Committee of Correspondence for the Town of *Chelsea*, be desired to take such effectual methods for the prevention of any Provisions being carried into the Town of *Boston*, as may be sufficient for that purpose.

May 10, 1775

Elijah Shaw declares, that General *Gage's* officers have said in his hearing, that they shall soon come out; and that a soldier requested him to convey him into the country, for the Troops would soon make a push either towards *Dorchester Neck* or *Chelsea*; but he refused. Further declares that Earl *Percy* swears he will be revenged on some of our men; and further says that the Troops have robbed him of eleven cows, three calves, a yearling heifer, forty-eight sheep, sixty-one lambs, four hogs, and poultry, hay five tons, and almost all his furniture.

(St. Clair Clarke, M. and Peter Force. 1837. *American Archives: Fourth Series, Containing A Documentary History Of The English Colonies In North America, From The King's Message To Parliament, Of March 4, 1744, To The Declaration Of Independence By The United States.* Series 4 Vol. 2. Washington, 753-754.)

MASSACHUSETTS COMMITTEE OF SAFETY

May 14, 1775

Resolved, As the opinion of this Committee, that all the live-stock be taken from *Noddle's Island*, *Hog Island*, and *Snake Island*, and from that part of *Chelsea* near the sea-coast, and be driven back. And that the execution of this business be committed to the Committee of Correspondence and Selectmen of the Towns of *Medford*, *Malden*, *Chelsea*, and *Lynn*, and that they be supplied with such a number of men as they shall need, from the Regiment now at *Medford*.

May 15, 1775

Voted, That the *Hampshire* Companies, now at *Medford*, if enlisted into this Colony's service, under Colonel *Stark* or Colonel *Sargeant*, and properly equipped, shall be provided with barracks; those of them, if any, who are not, and do not choose to be enlisted, and are not equipped, are to be furnished with provisions for their return.

(St. Clair Clarke, M. and Peter Force. 1837. *American Archives: Fourth Series, Containing A Documentary History Of The English Colonies In North America, From The King's Message To Parliament, Of March 4, 1744, To The Declaration Of Independence By The United States.* Series 4 Vol. 2. Washington, 757-758.)

MASSACHUSETTS COMMITTEE OF SAFETY

May 23, 1775

Whereas, our enemies make frequent excursions to the Islands and Sea-Coasts, from whence they plunder Hay, Cattle, and Sheep, which not only greatly injures many individuals, but also the publick, and strengthens the hands of our enemies: Therefore,

Resolved, That it be recommended to the Honourable Congress to take some effectual measure to secure the stock on the Islands and Sea-Coasts, to prevent its falling into the hands of our enemies.

Whereas, this Committee have taken into their most serious consideration the state of the *New-England* Army, proposed to be raised for the defence and security of the lives, liberties, and property of the *Americans*, and find that the several Colonies have not, collectively, raised more than twenty-four thousand five hundred men, whereas thirty thousand were supposed to be necessary; and the said Committee also find a considerable number of officers of Minute-men now at Head-Quarters, who, with their men, cannot find room for employment in the Army,

upon the present establishment of this Colony; and as our enemies have determined to distress us upon our Sea-Coasts, by taking our vessels, with provisions, salt, molasses, &c., as well as by plundering our Islands and Coasts of live stock, which will require a greater number of men to guard said coast than was at first estimated; and as said Army, or any part thereof, may be disbanded at any future time, when the publick safety will admit thereof; and as the publick military spirit runs high: it is, therefore,

Resolved, That the consideration of these premised be recommended to the honourable Congress; and that Colonel Palmer be directed to attend said Congress with this Resolve, in order to know whether thy will make any addition to the present establishment.

(St. Clair Clarke, M. and Peter Force. 1837. *American Archives: Fourth Series, Containing A Documentary History Of The English Colonies In North America, From The King's Message To Parliament, Of March 4, 1744, To The Declaration Of Independence By The United States.* Series 4 Vol. 2. Washington, 762.)

MASSACHUSETTS PROVINCIAL CONGRESS

May 23, 1775

The Committee appointed to bring in a Resolve respecting the depredations of the *British* Troops on the Islands and Sea-Coasts, reported as follows:

Whereas, the Troops and Forces under the command of the General *Gage* and Admiral *Graves* are frequently plundering and making depredations on the Islands and Sea-Coasts of this Province, from whence they plunder or purchase Hay, Cattle, Sheep, and many other things, to the injury not only of individuals, but also to the great damage of the publick, and thus strengthen the hands of our enemies: therefore,

Resolved, That it be recommended to the several Towns and Districts on the Sea-Coasts of this Colony, and to all those persons living on the several Islands on said Coasts, that they remove their Hay, Cattle, Sheep, &c., that are exposed to those ravages, and cannot be sufficiently guarded, so far into the country as to be out of the way of those implacable enemies of this people; also, that it be recommended to the Committees of Correspondence in each Town and District, and to the Selectmen, where no such Committee is chosen, that they take effectual care that this Resolve be immediately and strictly put into execution; and that all persons who refuse to comply with the foregoing Resolve shall be held as incorrigible enemies to the rights and liberties of this Country.

(St. Clair Clarke, M. and Peter Force. 1837. *American Archives: Fourth Series, Containing A Documentary History Of The English Colonies In North America, From The King's Message To Parliament, Of March 4, 1744, To The Declaration Of Independence By The United States.* Series 4 Vol. 2. Washington, 818.)

MASSACHUSETTS COMMITTEE OF SAFETY

May 24, 1775

Resolved, That it be recommended to Congress immediately to take such order respecting the removal of the Sheep and Hay from *Noddle's* Island, as they may judge proper, together with the stock on the adjacent islands.

Voted, That the Commissary-General be directed to supply twenty-five men of Captain *Sprague's* Company, who are stationed at *Chelsea*.

May 30, 1775

Elisha Lettinwell was directed to proceed with two Teams to *Chelsea*, and bring from thence the Cannon and other Stores saved from the Schooner which has been burned by our people, and to lodge said Stores in this Town.

(St. Clair Clarke, M. and Peter Force. 1837. *American Archives: Fourth Series, Containing A Documentary History Of The English Colonies In North America, From The King's Message To Parliament, Of March 4, 1744, To The Declaration Of Independence By The United States.* Series 4 Vol. 2. Washington, 763-764.)

MINUTES OF MASSACHUSETTS PROVINCIAL CONGRESS

June 2, 1775

Ordered, That Captain *Parker*, Captain *Thatcher*, Mr. *Jewett*, Colonel *Porter*, and Mr. *Singletary*, be a Committee to consider what is best to be done with the Horses lately taken from *Noddle's* Island.

The Committee appointed to consider what is best to be done with the Horses taken from *Noddle's* Island, reported. The Report was accepted, and is as follows, viz:

The Committee appointed to consider what shall be done with the horses taken by our forces from *Noddle's* Island, which belong to our enemies, beg leave to report, that the same horses be delivered to the Committee of Supplies, to be by them used and improved for the benefit of the Colony, as they shall think fit, until further orders from this or some future Congress, or House of Representatives.

June 3, 1775

The Committee appointed to consider the situation and circumstance of the Islands and Sea-Coasts, reported:

1st. That the Petition of Colonel *Lithgow* be committed to the Committee of Supplies.

2d. A Resolve on the subject of Mr. *Nye's* Letter; which is as follows:

Whereas, the forces under the command of General *Gage* are frequently plundering and making depredations on the islands and sea-coasts of this Province, particularly on the Island of *Naushan*, and others adjacent, whereby not only individuals, but the publick are much injured, and our enemies strengthened:

Resolved, therefore, That it be recommended to all those persons occupying the islands or sea-coasts aforesaid, which are exposed to be ravaged or plundered, and cannot be defended by the inhabitants, to remove all their Hay, Cattle, Horses, Sheep, &c., so far into the country, or otherwise dispose of them, that they may be out of the way of our implacable enemies; also, that it be recommended to the Committee of Correspondence in each Town and District, or Selectmen, (where no such Committee is chosen,) to take effectual care that this Resolve be immediately, strictly, and fully executed; and that all persons who refuse to comply herewith be viewed as disposed to furnish our enemies with such unremoved Hay and Stock, and shall therefore be held as inimical to the liberty and rights of this Country.

(St. Clair Clarke, M. and Peter Force. 1837. *American Archives: Fourth Series, Containing A Documentary History Of The English Colonies In North America, From The King's Message To Parliament, Of March 4, 1744, To The Declaration Of Independence By The United States.* Series 4 Vol. 2. Washington, 1385-1386.)

MINUTES OF MASSACHUSETTS PROVINCIAL CONGRESS

June 13, 1775

Resolved, That Mr. *Sullivan* have liberty to use the Horse in Mr. *Fowl's* pasture in this Town, which was taken lately from *Noddle's Island*, for his journey to *Ticonderoga*.

(St. Clair Clarke, M. and Peter Force. 1837. *American Archives: Fourth Series, Containing A Documentary History Of The English Colonies In North America, From The King's Message To Parliament, Of March 4, 1744, To The Declaration Of Independence By The United States.* Series 4 Vol. 2. Washington, 1408.)

MINUTES OF MASSACHUSETTS PROVINCIAL CONGRESS

June 21.

Ordered, That Mr. James Munroe, an armorer in the provincial service take into his keeping a quantity of Old iron, saved out of the cutter, burned at Winnesimet Ferry, he to be accountable to the Committee for the same.

(Chamberlain, Mellen. 1908. *A Documentary History of Chelsea Including the Boston Precincts of Winnisimmet, Rumney Marsh, and Pullen point 1624-1824*. Vol. 2. Boston: Massachusetts Historical Society, 448.)

MINUTES OF MASSACHUSETTS PROVINCIAL CONGRESS

Monday, June 26, 1775

A list of the officers and soldiers of Captain Samuel Sprague's company was presented to the Congress, whereupon, *Ordered* that commissions to be delivered to the said officers, viz.: Samuel Sprague, Captain; Joseph Cheever, Lieutenant; William Oliver, Ensign; and that the Company be joined to Colonel Gerrish's regiment.

(Bossom, Albert D. 1900. "The Battle of Chelsea." In *Register of Old Suffolk Chapter Sons of the American Revolution*. Boston: Press of Wallace Spooner, 45.)

MASSACHUSETTS COMMITTEE OF SAFETY

July 3, 1775

Henries Vonhari, and Indian, having represented to this committee that he had taken two horses at Noddle's Island, one a little horse, which he is desirous of retaining as some recompense for his fatigue and risk in that action, in which he is said to have behaved with great bravery, it is the opinion of this committee that said Indian should be gratified in his request, which will be an encouragement to others in the service, provided the honorable Congress should approve thereof.

(Bossom, Albert D. 1900. "The Battle of Chelsea." In *Register of Old Suffolk Chapter Sons of the American Revolution*. Boston: Press of Wallace Spooner, 43.)

MASSACHUSETTS PROVINCIAL CONGRESS

July 4, 1775

The Committee upon the Letter relative to the Indian's having a Horse, reported. The Report was accepted, and is as follows, viz:

Resolved, That a small Horse, taken by *Henries Vomhavi* from *Noddle's Island*, be granted to the said *Henries* for his own use, to encourage his further brave conduct and good behaviour in camp.

(St. Clair Clarke, M. and Peter Force. 1837. *American Archives: Fourth Series, Containing A Documentary History Of The English Colonies In North America, From The King's Message To Parliament, Of March 4, 1744, To The Declaration Of Independence By The United States.* Series 4 Vol. 2. Washington, 1479.)

MASSACHUSETTS COMMITTEE OF SAFETY

July 10th

In Committee of Safety, Cambridge, July 10th, 1775. Resolved, that the store-keeper, Mr. Cheever, be, and he is Hereby Directed, to supply Mr. Benja Gwilliam with one quarter of a Hundred of the Old Iron, Saved out of the Vessel Burnt at Chelsey, if in your Possession, it being for the Colony armorer. Abram Watson, June. Pr. order

Mr. Benjamin Gwilliam, an armorer, had an order on the committee of supplies, for two hundred pounds of iron, and what files and old brass, he has occasion for, for himself, and others that work in his shop.

MISCELLANEOUS

August 1

Orders given from the general, for scouting parties to fire at all times, when they have opportunity. The same day, raised the mast that came out of the schooner, that was burnt at Chelsea, for to hoist our flag upon, in the fort upon Prospect Hill, in Charlestown, seventy-six feet high. Paul Lunt's Book. Proc. MassHist. Soc., xii. 197.

(Chamberlain, Mellen. 1908. *A Documentary History of Chelsea Including the Boston Precincts of Winnisimmet, Rumney Marsh, and Pullen point 1624-1824*. Vol. 2. Boston: Massachusetts Historical Society, 448-449.)

5. General Artemas Ward General Orders in Colonel Henshaw's Orderly Book

April 21st

This day, General Putnam of Connecticut attended the Council of War.

April 22nd

THE GENERAL ORDERS – That Colonel Stark march to Chelsea and take three hundred men with him to defend the inhabitants of said town.

May 2nd

That Major McClary, with the regiment under his command, repair to Medford, and join the forces there, and keep a vigilant guard as far down the river as Winter Hill, until further ordered.²⁸

May 28th

GENERAL ORDERS. That Colonel Doolittle march with four hundred men to Chelsea and relieve Colonel Nixon and his party, with the other troops that went from this camp: and is to conduct in such manner as he may judge will most contribute to the general safety. If the cannon which are in the schooner which was taken yesterday can be secured without too much exposing the troops, he may bring them off; or otherways conduct, as his best judgment shall direct.

May 31st

GENERAL ORDERS. ---- That the stock which was taken from Noddle's Island belonging to Mr. Henry Howell Williams be delivered to his father, Colonel Joseph Williams of Roxbury, for the use of said Henry H. Williams.

June 2nd

GENERAL ORDERS. ---- That all such persons who have horses in camp that were taken from Hog Island and Noddle's Island return them immediately to head-quarters, excepting such horses as the owners have had general orders to take.

July 13th

The commanding officer at Chelsea is as soon as possible after the receipt of this order, to direct all the cattle at Pulling Point, Shirley Point, and the intermediate place between Powderhorn Hill and the sea, to be driven off.

July 15th

²⁸ This was Stark's Regiment.

It being found advantageous to the public service to remove sundry horn cattle and sheep from the grounds near which they were grazing, near Chelsea (to prevent their falling into the enemy's hands), it is earnestly recommended to the several commissioners to purchase such of them as are fit for slaughter, of the owners, in order that they may suffer the least loss possible, from the unavoidable necessity of removing them from [the] rapacious jaws of our enemies.

(Henshaw, Colonel William. 1775. *The Orderly Book Of Colonel William Henshaw Of The American Army, April 20 – September 26, 1775* Notes by Charles C. Smith. Reprint 1877. Boston: Press Of John Wilson And Son.)

6. Colonel Doolittle's Rum Order²⁹

General Orders of General Artemus Ward

[Camp at Cambridge, May 28, 1775]

The General Much Approves of the Vigilance & Courage of the Officers and Soldiers under the Command of Col. [Ephraim] Doolittle in the late Action at Chelsea, & has ordered 2 Barrils of Rum to be dealt out to them in equal portions for their Service.

(Clark, William Bell, Editor. 1964. *Naval Documents Of The American Revolution*. Vol. 1. Washington, D.C.: U. S. Government Printing Office.)

7. Diary Accounts

7.1. Amos Farnsworth³⁰

Friday May ye 26. in the morning I Etended prayers And at night: I hope that I Git good in this Day of grace. At night I and about ten of our Company march^t with A party of men betwixt two and three hundred for Noddels island; heded By Col Nixson we marched throu Mistick Moldin and to Chelsea

Saturday, May ye 27. went on hog island And Brought of Six hoses twentyseven horn^d. Cattel And fore hundred And Eleven Sheep about the midel of the afternoon went From hog island to Noddles island and Sot one Hous and Barn on fiar kil^d. Some hoses and Cattel Brought of two or thre Cows one horse I with five men got of the horse And

²⁹ This order does not appear in the orderly books and is undated. Many historians assume that it refers to the May 27-28, 1775 actions along Chelsea Creek. However, it is quite possible that this order is in reference to one of the subsequent actions on Noddle's Island perhaps that of May 30-31, when the mansion and farm being manage by Henry Howell Williams was burned.

³⁰ Amos Farnsworth of Groton, Massachusetts was a corporal in Captain Henry Farwell's Company of Colonel William Prescott's Regiment. His small detail accompanied Colonel Nixon on the march to Hog Island. He was part of the 30 man detachment sent to Noddle's Island. His diary provides the only first person account we have of this phase of the Battle of Chelsea Creek.

Before we got from Noddels island to hog island we was fir^d upon by a Privatear Schooner But we Crost the river and about fifteen of us Squated Down in a Ditch on the mash and Stood our ground. And thare Came A Company of Regulars on the marsh on the other side of the river And the Schooner: And we had A hot fiar until the Regulars retreated. But notwithstanding the Bulets flue very thitch yet thare was not a Man of us kil^d. Suerly God, has A faver towards us: And He can Save in one Place as well as Another we left the island about Sun-Set and Came to Chelsea: And on Saturday about ten At night March^d, to Winnisimit ferry whare thare was A Schooner and Sloop Afiring with grate fury on us thare But thanks be unto god that gave vs the Victry at this time for throu his Providence the Schooner that Pla^d upon us the day before run Aground and we Sot fiar to hur And Consumed hurt hare And the Sloop received much damage. in this ingagment we had not A man kild: But fore wounded but we hope all will Recover, one of the fore was A tounsing³¹ man belonging to our Company the bullet went throu his mouth from on Cheek to the other. thanks be unto God that so little hurt was Done us when the Bauls Sung like Bees Round our heds.

Sunday May 28. Left Winnisimit ferry About ye middle of ye fore noon And Came to Chelsea And About two in ye afternoon Received ordars to march and Came to Cambridge, By ye way of Penny ferry.

Thursday June ye 1. thare was Sheep and Catel and horses we hear to ye Amount of fore or five hundred Sheep twenty or thurty Cattel And A number of horses brought along that our People took from the Regulars of noddles island. Blesed be God for the interposition of his Provedence on our Side in that He has Delivered into our hands So much of thare goods or Substance And in Saving of us in ye late Battle when in Such Ement Danger Suerly God fote the Battle And not we

(Farnsworth, Amos. 1775-1779. "Diary Kept By Lieut. Amos Farnsworth Of Groton, Mass., During Part Of The Revolutionary War, April 1775-May 1779." Edited by Samuel A. Green. In *Proceedings of the Massachusetts Historical Society*. Vol. 32 1897-1899: 80-81.)

7.2. James Stevens³²

Saterday ye [27] this morning I was Cald on feteg we went & workd in the forenune we Come hom to diner & there was a perty agoing of sumer but where I cant

³¹ Townsend, Massachusetts.

³² James Stevens of Andover, Massachusetts was a private in Captain (Major) Poor's Company of Colonel James Frye's Regiment. He was part of the Putnam Reinforcement during the night of May 27. Like Farnsworth, Stevens' account is the only first person account we have of this phase of the battle. The unidentified "man" Stevens refers too is intriguing. It is possibly Stark or Nixon, placing reinforcing troops as they came up, but they were probably in the area of Chelsea Meeting House. It is not Putnam, as Stevens knows who Putnam was and refers to him by name. It is possible that this man is Joseph Warren. Tradition and some sources claim he was there, encouraging the troops.

tel we got redy to go & there Com a expres that the regerlers was a landing some said at miskit but we marcht to miskit & then we herd that thay was at Chelsy we marcht very fast we got dow[n] within a quarter of a mile of the fery & then halted & our ofisers went to louk out to place the canon they went round by the water while thay come in sight of the sconer when as son as the regerlers saw our men thay fired on them then the firing Begun on boath sides & fired very worm there come a man & ordered us over a nol rit into the mouths of the canon we got on the top of the nol & the grap shot & canon bauls com so thik that we retreted back to the rode & then marcht down to the fery the regerlers shouted very much our men got the canon & plast them & gave them tow or three guns sids and the firing set in so [me] masure & there was a terrabel cry a monst the regerlers thay fired wonc & a wile all night about ten aclok the sconer run on to the wais & stuk fast there come a slup for her relief they left the sconer

Sunday ye 28 this morning a bout day thay come with thare barjes to bord the sconer Curnul putnum Com & ordered us down to the whoife & we fired so that thay retreted back to the sloup our men run down & fired the sconer & it burnt very fast the slup begun to to of in about three qurters of a our after it was sot on fire the magersene Blod up & blod out some plunder thay fired from Nodles oiland on us sun about an our hy we are retreted back to our packs & gout our Brekfast the slups drad of to Boston there was of our men wounded fore & non cild after the fier was gon down the men went & got out the plunder out of the rack in the afternune there come down about fore hundred men to relieve us & there was of us about a hundred & twenty men of us tords night thay got tems & cared a lode of to Cambridge we staid all night

Munday ye 29 this morning we went down to the sconer & got out som more of the plunder we staed about while the afternune & then set out for Cambridg we got up to Cambridg about dusk being very much feteged

(Stevens, James. 1775-1776. "The Revolutionary Journal Of James Stevens Of Andover, Mass." In *The Essex Institute Historical Collections*. Vol. 48 January 1912: 45-6.)

7.3. Samuel Bixby³³

May 27th. Saturday. About 200 men were detached to go to the Point to guard it. About 9 or 10 o. c. in the evening we heard the cannon road, and the small arms crack for about an hour, in the direction of Marblehead or Medford, as we thought. We have since learnt that it was Col. Putnam, & his men on Noddle's Island, where he engaged the regulars,

³³ Samuel Bixby of Sutton, Massachusetts was a private in Colonel Learned's Regiment and was stationed with General Thomas at Roxbury.

and took 300 sheep, & 200 lambs. One ship run aground, & they burnt it. He also took some cattle.

June 5th. Monday. This day is “Artillery Election;” but it was not much thought of by the soldiers. About 12 o. c. the regulars fired from the Fortification; and they fired from the Castle at a party of our men on shore digging clams, but did no damage. Our men picked up one of the balls, a 24 pounder, and carried it to the Gen., who gave them two gall. Of rum. A party of our men out towards Noddle’s Island captured a barge and four men belonging to a man of war, & carried it ashore at Cambridge, and this day brought the barge to Roxbury in a cart, with the sails up and three men in it. It was marched round the meeting-house, while the Engineer fired the Cannon for joy.

(Bixby, Samuel. 1876. “Diary of Samuel Bixby.” In *Proceedings of the Massachusetts Historical Society* Vol. 14 Boston: Massachusetts Historical Society, 285-286.)

7.4. Caleb Haskel³⁴

May 22nd, Monday.-Today a party of the enemy came out and landed on Grape Island, near Weymouth, in order to take some cattle off the island. Our people at Roxbury discovered them. A number went over on the Island and beat them off without the loss of a single man.

Set fire to a barn and destroyed it with the hay, and brought the cattle off at night. I went on guard at Lechmere’s Point.

May 23rd, Tuesday.-Came off guard this morning. Were paraded on the common in the afternoon. Heard prayers.

May 24th, Wednesday.-All still in the camp. No remarks.

May 25th, Thursday.-Attended prayers night and morning. Our army in high spirits.

May 26th, Friday.-Fine weather. This evening about 300 of our people went down to Chelsea to prevent the enemy from taking the cattle off from Noddle’s Island.

³⁴ Caleb Haskel from Newburyport, Massachusetts was a private in Captain Ezra Lunt’s Company of Colonel Moses Little’s Regiment. His diary provides a good day to day account of the events going on during the entire time of the action along Chelsea Creek.

May 27th, Saturday.-Today, a party of the Massachusetts and New Hampshire forces, about 600, went over to Noddle's Island to bring off some cattle. The enemy landed on the Island, and pursued our men till they got back to Hog Island, at which time an armed schooner belonging to the enemy came to their assistance, and to prevent our people from leaving Hog Island-which she could not effect. Our people put a heavy fire of small arms upon the barges. Capt. Foster came with two field pieces and began to play upon the schooner, which soon obliged them to quit her. She then caught on Winnisimmet ferryways. Our people set fire to her and burned her to the water. We saved all that was not burned. We took four pieces of cannon, a number of swivels and some clothing, and brought all the cattle off from both islands. In the engagement we had not one killed, and but three wounded, and those not mortally.

May 28th, Sunday.-This morning, held ourselves in readiness to assist our men fighting at Chelsea, which detained us from public worship. In the afternoon heard Dr. Langdon, from John 3: 16-17.

May 29th, Monday.-This day, a quantity of the spoil taken at Chelsea was brought to Cambridge. In the evening saw a large fire, supposed to be in Boston. Had a report that 1000 men would come out; held ourselves in readiness to meet them.

May 30th, Tuesday.-This day, the remainder of the cattle taken from off the Island were brought to Cambridge.

May 31st, Wednesday.-This day the new Provincial congress met at Watertown, before whom the Rev. Dr. Langdon preached a sermon well adapted to the occasion from Isaiah 1:26. Joseph Warren esq., was chosen president, and Mr. Samuel Freeman, secretary.

June 1st, Thursday.-Nothing remarkable today.

June 2nd, Friday.-This morning a man belonging to Haverhill hung himself in a barn. A number of men with artillery went about their business-private.

June 3rd, Saturday.-This morning our men at Chelsea took a barge with two men near Deer Island; took two men and 400 sheep, and a number of cattle from off the Island. In the afternoon the army were all drawn up on the common, when two men were whipped, and one drummed out for stealing. In the evening the barge that was taken was brought to Cambridge on wheels.

June 4th, Sunday.-This morning attended public worship at Cambridge; heard Mr. Cleaveland of Cape Ann, from Isaiah 1st., 21, 22, and 23. I On the afternoon went to Watertown; heard Mr. Woodward of Weston, from Psalm 126, 5.

June 5th, Monday.-Nothing remarkable today.

June 6th, Tuesday.-Today General Putnam went down to Charlestown, and exchanged six prisoners with General Gage, and brought our men to Cambridge.

June 7th, Wednesday.-This morning I rode down to Roxbury; went down to the lower sentinel, attended prayers on the common in the evening.

June 8th, Thursday A very dry season. This morning a bad woman was taken up in the camp, in the afternoon was doused in the river, and drummed out of town.

June 9th, Friday.-This morning our regiment was paraded. We had an alarm; heard that 1400 of the enemy were landed at Noddle's Island.

June 10th, Saturday.-Today our people at Chelsea went over to Noddle's Island, set fire to a building improved by the enemy for a store, and laid it in ashes. Those that lay near by fired on them several times, but did no damage. There is now no building left there.

(Haskell, Caleb. 1775-1776. *Caleb Haskell's Diary May 5, 1775 – May 30, 1776 A Revolutionary Soldier's Record Before Boston And With Arnold's Quebec Expedition*. Edited by Lothrop Withington. 1881. Newburyport, MA: William H. Huse & Company: 5-6.)

7.5. Ezekial Price³⁵

Saturday, May 27. – Very warm. In the afternoon, heard the report of cannon. About sundown, the firing of cannon was very quick. Went down to St: Davenport's, but could hear nothing of the occasion of the firing. About eleven o'clock, went down again, but could get no certain intelligence. A report that Colonel Putnam had gone with a party to Hog Island.

Sunday, May 28. – Early in the morning, report of cannon heard. At noon, received information that yesterday Colonel Putnam, with a party, went to Hog Island to bring from thence the stock of cattle and sheep and hay there. He was opposed by the navy and

³⁵ Ezekiel Price was living in Stoughton, Massachusetts at the time of the Battle of Chelsea Creek. He provides a civilian's perspective.

army, but came off victorious, and without loss of a man. He brought off a number of sheep and lambs; he also burnt a tender, after taking out her guns, stores, and ammunition; he also killed about twelve of the English horses, and brought away three alive, which had been put on the island to recruit of their fatiguq on the passage. It is said this success had given the colonel and the country troops great spirits. In the afternoon, several persons, passing by, heard the report of cannon. It is supposed a new attack is made towards Chelsea.

Monday, May 29. -- In the morning, went down to Roxbury, and had confirmation of the account of Colonel Putnam's engagement and success. He had five men wounded: one, it is said, died of the wounds. The Regulars had several killed and wounded, - the number uncertain. Received two trunks, with linen and clothes, and a feather-bed, which Mr. Fritz brought out of Boston for me; also a small trunk for Mrs. Harrison; all which I got safe to Colonel Doty's. A very warm day. Mr. Robert Temple was expected at Cambridge, from Plymouth, to answer concerning a number of Tory letters found with him, to be conveyed to England.

Tuesday, May 30. – The air cool. Appearances of rain. A house on Thompson's Island, and the house and some buildings on Noddle's Island, were burnt last night. Son Zek visited us.

Saturday, June 10. – This forenoon, nothing remarkable. The afternoon, some soldiers passing to the camp, others going home on furlow. A report that a party of the Continental Army had gone to Noddle's Island to destroy a barn and some out-houses remaining there, and bring off two colts. The ground this way very dry.

(Price, Ezekiel. 1775-6. "Diary Of Ezekiel Price, 1775-6." In *Proceedings Of The Massachusetts Historical Society 1863-1864*. n. v. 1864 Boston: John Wilson and Son: 185-6, 187.)

7.6. Paul Lunt³⁶

Saturday, 27th.—A number of men (about six hundred) marched to Chelsea with two cannon, in order to burn some hay and drive off a number of cattle and sheep from Hog and Noddle's Island. There came an armed schooner against them from Boston, and ran aground between the islands and began a battle. Our men burnt the vessel without the loss of a man, and she kept a continual fire all the time till she was set on fire. She carried twelve cannon and four swivels.

³⁶ Paul Lunt of Newburyport, Massachusetts was a first lieutenant in Captain Ezra Lunt's Company of Colonel Moses Little's Regiment, the same unit as Caleb Haskel.

Sunday, 28th.—Six hundred men marched to Chelsea to relieve those that were there.

(Lunt, Paul. 1775. "Paul Lunt's Book, Newburyport, May 10, 1775, A Journal Of Travels From Newburyport To Cambridge And In The Camp." In *Proceedings Of The Massachusetts Historical Society 1871-1873*. n.v. 1873 Boston: John Wilson and Son: 193.)

7.7. Phineas Ingalls³⁷

May 27. About noon 14 were drawn out of our company with 8 officers viz. Capt. Poor, Sergt. Chickering & Sergt. Johnson. About sunset we heard they were upon Hog Island. Heard that a company went before. Heard firing all night. At night about 200 went down to Lichmore point.

Sunday, May 28. Heard that the Regulars had wounded 3 or 4 of our men and that ours had killed some of the Regulars and burnt one ship and took some cannon. This forenoon some more of our company went to the Island where the rest of them went yesterday. Went to meeting this forenoon. Text: Ezek. 33:11. We heard that our men had got the victory and burnt one sloop and got a good deal of plunder. There were 3 loads come ion that our men had got. They had a very hot fight, took 4 pieces of cannon and 8 or 9 swivels. Four of our men were wounded, but none killed. A man came out of Boston who said he saw 200 dead and wounded Regulars.

May 29. This morning I was called and went to the guard house. Our men who went out Saturday came home today.

May 30. Heard this morning that the Regulars were gone to Salem. I came off guard at 9 a.m. Heard our men were getting cattle off of Noddle's Island, that they had got about 30 head of cattle and about as many horses & 300 sheep. Our men had an alarm that the Regulars had gone to Salem. They started for Salem and at Esty's [Middleton] there heard they had not come so they came to Cambridge. They heard we were fighting. Col. Frye came with the men who started for Salem. Bo 1 pt. milk /6.

Election, May 31. Bo 1 pt Rum, 4 eggs a lemon 6/. Called out on fatigue and went intrenching. Bot ½ cake gingerbread 1 copper. Two men buried this afternoon.

June 1 [1775]. Bo 1 pt milk, 2 coppers. Nathan Ingalls, Thomas Kimball & Daniel Kimball here and went to see the breast works.

³⁷ Phineas Ingalls of Andover, Massachusetts was a private in Captain (Major) Thomas Poor's Company of Colonel James Frye's Regiment. He was a friend of James Stevens, however, he did not accompany Major Poor's Detail or the Putnam Reinforcement.

June 2. A man hung himself in a barn. He was found at daylight this morning. Supposed to have hung about ½ an hour. 5 chap. James.

June 3. Heard that a party of our ment went to Deer Island & took one of the Man of Wars barges & 4 ment one yoke of oxen and some sheep. The boat brought here about 5 p.m. Two men whipped one 20 & the other 10 lashes. One man drummed out of the army.

(Ingalls, Phineas. 1775-1776. "Revolutionary War Journal, Kept by Phineas Ingalls of Andover, Mass., April 19, 1775-December 8, 1776." Communicated by M.V.B. Perley. In *The Essex Institute Historical Collections*. Vol. 53 1917 Salem, MA: Essex Institute: 83-4.)

7.8. Lieutenant John Barker³⁸

May 25th. Generals Howe, Clinton, and Burgoyne arrived in the Cerberus, Cn. Chads. A Capn. And 50 Men order'd last night; did not go on account of the tide not serving; that order'd this morning went to Long Island to bring off some hay.

26th. The King's Ships in harbor saluted Adml. Greaves on his being promoted to be Vice Adml. Of the White. The Royal Artillery enamp'd on the same ground as last summer; A Guard order'd over them of 1 Serjt., and 18 Private.

May, 28th. Yesterday afternoon about 40 of the Rebels came to Noddles Island expecting to meet with hay to destroy: they set two houses on fire and began killing the Cows and Horses, which the Adml. Seeing immediately dispatched the Marines from the Men of War to drive the Rebels away, and at the same time sent some Boats and an armed Schooner round the Island to intercept them; the Rebels as soon as they saw this scour'd off as fast as they cou'd and escaped by wading up to their necks; one was killed in the flight; after this there was a constant firing at each other from the opposite sides of the water, but I believe without any mischief; there was also firing at and from the Schooner and boats, which continued all night and part of this morning. I fancy we are the greatest sufferers for some time in the night the schooner run aground within 60 yards of their shore, and after a cannonade a considerable time on both sides, having no chance of saving the Schooner as the tide was going out, they were obliged to set her on fire and quit her, without being able to save a single article; she

³⁸ Lieutenant John Barker served in the King's Own Regiment and was a member of the Boston garrison under General Thomas Gage. He provides a British perspective.

was quite new and just that day came in from a Cruise; she mounted 4 guns and 10 swivels. A reinforcement of 100 Marines was sent over to the Island last night; they had last night two 3 pounders from the Cerberus with which we kept a cannonade great part of the night, and this morning two 12 pounders field pieces were sent over with a detachment of Artillery, which has been playing on the Rebels most of the morning, but I dare say without doing much harm as it was at a great distance; about 2 o'clock they left the Island and came off home. I hear we have 2 killed and 2 wounded with Sailors and Marines.

29th. To day the Rebels were seen again on the same Island; all the light Infantry Companies were immediately order'd to parade, which took up a long time as many Men were on duty and obliged to be relieved. In about 2 hours were dismissed, and the Rebels left to do their business quietly, which by 6 o'clock in the even, they effected: they drove all the Cattle and Sheep off to the Main and set fire to four houses; at 8 o'clock a house was set on fire at Hog Island which is very near the other. I suppose after the light Companies were order'd, it was thought hardly worth while running the risk of losing any lives by endeavouring to save a trifling property which we have no connexion with, nor indeed cou'd it be worth while for it cou'd be of little consequence to us, and their burning the houses (which are only Out house and Barns I believe) can answer no other end than insulting us, and what we have not in our power to resent, for tho' we have new Generals come out, yet they have brought no more authority than we had before, which was none at all. The Corps to day waited on the three General Officers lately arrived; politely recd.

Another addition was order'd to day of 4 S., 4 C., 80 Pri. Form the different Corps to do duty with the Artillery, they have now 180, besides that they are so weak that the other Corps are obliged to give 'em a Guard for their Park of Artillery.

Another house was burnt beyond Dorchester Neck on Moon Island and we cou'd perceive a fire some where beyond Cambridge, I suppose Tories Houses.

May, 30th. The Rebels this morning set fire to a dwelling house upon the same Island: the house was almost close to the shore and within reach of the Admiral's Guns, which have been playing upon the Island every now and then most of the morning, whether because any Men were seen or only just to frighten them I don't know; a schooner was also sent to fire along shore; they had better take care not to run aground and get burnt by the Yankies, like the last. Near this house there was an outhouse where there were several Navy stores, which the Admiral has been taking out all day, and to protect the Men at that work he sent a flat Boat with a gun in it along shore, which has been firing frequently at the Rebels I suppose. This morning the 5th, 38th, and 52nd encamp'd in the Fields adjoining the Common; those Companies of the 43d which were Copps Hill removed to the other part of the Regt. At Barton's Point and 6 Companies of the incorporated Corps took up their ground. Copy of an after Order: "s the Genl. Finds proper care is not taken of the Ammunition, he directs the Commandg. Officers of Corps to order the Men's Cartridges to be examined every day, and for every Cartridge missing not accounted for, such soldier to be charged one penny. Some Cattle lately brought from Hallifax is to be divided among the Troops, who are to receive two days fresh provisions this week.

31st. Nothing extraordinary but the Rebels practictising with Cannon up the Country. The Senegal arrived from England.

June 1st. Last night a Ball passed over our Camp, fired from Town. The Cerberus this morning sailed down to Nantasket Road, to be in readiness to sail in a few days. Some of the idle Fools frequently fire small Arms at the Glasgow, and at our Camp; us they never reach, but they sometimes stick a Ball in the Ship, who never returns it tho' she has it in her power to drive 'em to the D-----l.

2nd. The Lively and Nautilus came up, the Lively took the place of the Somerset, who went further down thee not being water enough. –A Prize was lately taken of a Ship loaded with flour, this will make up for what was lost in the fire.

3d. This day the Lovely Nancy who went to England some months ago, returned from there, bringing Necessaries for the Army; in her came Col. Prescott now made a Brigadier General.

4th. This being the king's Birth-day, the Men of War fired a Royal Salute, but it being Sunday nothing was done by the Troops.

At 8 oclock this evening an order was issued for the Grenadrs. And Light Infantry to be embodied and to encamp tomorrow morning at 9 oclock.

5th. At 9 this morning the Grenrs and Lt. Infantry assembled at their ground, where they found nothing settled, no ground marked out for them nor was there anybody to mark it out or show them where to encamp; after waiting a considerable time, we set about pitching the Tents as we cou'd settle ourselves, the Grenrs. On the right, the Light Infantry on the left; the whole was not finished till 6 or 7 oclock, and after all it was then wrong and we must have to move again, for the St5reets are only single, by which means we have taken up twice the ground we ought. *Every thing still of a Piece!* Lt. Col. Clark our Commanding Officer, Mr. Batt (who is out of the Army) our Adjt. And Volunteer England our Qr. Master

To day in honour of his Majesty's Birthday at 12 oclock was fired a Royal Salute at the Lines, which was followed by the Royal Artillery on the Common, and then three Vollies from all the Piquets assembled and drawn up in King Street. At 1 oclock the Rebels likewise fir'd from Roxbury Hill, they fired but 9 rounds, it's imagined some accident happen'd to their Guns as they fired no more.

8th. At 4 this morning 2 Captns., 8 Subalns., and 200 Light Infantry were sent over to Noddles Island to bring off some Hay, which was effected without resistance. The Rebels indeed fired at 'em from the opposite shore but without doing any harm: there was a very small quantity of hay and that so bad that its only fit for litter; for such a paltry thing one wou'd think it was not worth while running the risk of losing a single Man, but I suppose the G-----l had received wrong information. Three Officers of the 43d Regt. Had today a very narrow and lucky escape, being out in a Boat sailing and not able to manage the Boat, the Wind drove 'em over to the Rebels shore who began firing on them; the Officers then had nothing but to swim for it as they found it impossible to keep off with the Boat, so they

jumped over board and were swimming for the Glasgow Man of War, who as soon as they saw their situation sent a Boat to their assistance which picked 'em up, one was so much spent that he cou'd not have swam much longer. The Villains ashore kept all the time popping at 'em; but luckily did not hit either; they also kept firing at the Man of Wars Boat; the Glasgow fired a Cannon at them which made the Rascals run and hide themselves; as soon as the Gentlemen were landed a boat was sent with swivels in her and armed Men, to bring off the boat the Officers had quitted which had not reached the shore but was stuck on the Mud; the Rebels tried to prevent them by firing from their lurking places, but the Tars kept them aloof with the Swivels and brought the Boat off; while they were doing that the Glasgow seeing some Men near the House opposite let fly a shot among 'em to keep 'em from going down to the shore to fire at the Boat; they run off and did not shew themselves again.

9th. This day a detachment of 2 Captns., 8 Subs., and 200 Men of the Corps of Light Infantry landed at Noddles Island, near 6 o'clock in the morning, for the purpose of bringing off Hay, which was effected without any loss; advanced Parties took possession of the Heights, and were scandalously abused by the people from the opposite shore; the Troops took no notice of them, tho' fired at frequently, the detachment did not fire a shot; there was a very small quantity of Hay and that good for nothing but litter; scarce worth sending 200 Men for one wou'd imagine.

(Barker, John. 1776. *The British In Boston Being The Diary Of Lieutenant John Barker Of The King's Own Regiment From November 15, 1774 To May 31, 1776*. Annotated by Elizabeth Ellery Dana. 1924. Cambridge: Harvard University Press, 50-57.)

7.9. Timothy Newell³⁹

May 27th. Our people set fire to hay and a barn on Noddle's Island; a number of Marines went over. Our People retreated over to Hog Island, the troops following, by being decoyed by our People down to the water, who then fired and the action continued all night (though very dark) also a Man of War schooner firing their cannon continually upon them which towards morning catch't aground upon Winesimet ferry ways. Our People boarded her and finally burn her- This action seems without a parallel, that, notwithstanding several hundred of the Kings Troops and the schooners were engaged all night and it is said 100 were wounded and fell- not the least hurt happened, except to three wounded of our People, who were commanded by General Putnam. The Lord manifestly appears on our side, and blessed be his glorious name forever.

30th. The manion house on Noddle's Island burnt by our People, the cattle and sheep &c. drove off. The Admiral sent a number of his People to take off some stores of the Men of war, which were in a ware house there, which was not opposed by our people who lay near; suppose when they had taken them on board a Sloop (which lay at the wharf) our

³⁹ Timothy Newell was a Boston Selectman and Deacon of the Brattle Street Meetinghouse.

people fired two cannon out of a little patch of wood on the top of the hill, which made them all fly precipitately.

31st. These several days last past we have been repeatedly alarmed with expectation of a general battle or attack on the town; many people put under guard and some sent on board the Men of War for the most trifling supposed offences.

June 1st. Mr Hopkins a carpenter released from on board the Admiral where he has been prisoner for 3 weeks for no reason than taking his own Canoe from one wharf to another. He complained that his fare on board was cruel viz. but half allowance of provisions; kept under deck without any thing to lodge on but the bare deck amidst the most horrid oaths and execrations, and amidst the filth and vermin &c. and left a number of prisoners in that same dismal state &c.

6th. Mr John Peck, Mr Frost, Mr Brewer and sundry others discharged from on board the Admiral in exchange of prisoners, viz Major Dunbar, Capt. Gould and a number of wounded soldiers.

9th. Last night several Gondaloes went to Noddle's Island for hay-two hundred and thirty Regulars went off soon after sunrise to support them. Upon the appearance of our people they tho't proper to retire and arrive safe back here.

(Extract of Timothy Newell's Journal is reprinted in: Tentindo, Vincent and Marylyn Jones. 1978. *Battle of Chelsea Creek May 27, 1775 (Graves' Misfortune)*. Revere: Revere Historical Commission, 94-95.)

7.10 William Cheever

May 21 A Party of Soldiers and Sailors, who man'd several Sloops the last Evening to go in quest of Hay and at Grape – Island near Weymouth, fir'd upon by our People and oblig'd to return with little or none—

May 28 Yesterday the Provincials set fire to some Hay on Noddles Island; as they did the 25 lms upon Hog Island collected for Government Use in consequence of which a party of marines were sent over, whereby a pretty constant fire was kept up best part of the night; and several of the regulars killed; Use a King's Schooner that wen to annoy the provincials listed upon Chelsea Beach & was set on fire and burnt.

May 30 Several Buildings were set on fire yesterday by the provincials on Noddle's Island; as likewise Hay was on Thompson's: and today the big Mansion of ----- H. Williams was tho entirely consumed and considerable of cattle drove off...

June 9 The Regulars landed at, and brought over from Noddle's Island a considerable quantity of Marsh Hay unmolested---

June 10 The Country People set fire to an empty Store on Noddles Island which had been lately improved by the King---

(Extract of William Cheever's Journal is reprinted in: Tentindo, Vincent and Marylyn Jones. 1978. *Battle of Chelsea Creek May 27, 1775 (Graves' Misfortune)*. Revere: Revere Historical Commission, 92.)

8. British Ship Logs

8.1. Journal of His Majesty's Ship *Preston*, Captain John Robinson, Commanding

May 1775 Remarks Boston Harbour

Friday 27 Admiral [Samuel] Graves being Promoted to Vice Admiral of the White, hoisted the white flag at 8 A M. The Squadron Saluted with 18 Guns, Returned 13.

at 2 P M. Saw a Number of Rebels on Noddles Island destroying some hay made the signal for Landing the Marines, at the same time sent the *Diana* Schooner round to cut off their Retreat. She went as far as there was water, but the Marines drove them off the Island. They kept a Constant fire upon the *Diana* from Hog Island and the Main which she returned with Great Spirit. at 6 the *Diana* weighed and got all the boats ahead to tow here. the Rebels kept a Continual fire upon them that they were at last ordered to cast off, and a breeze sprung up which set her in upon the Rebels Shore. Under all those Circumstances they defended here with great Courage till the Tide left her on her beam ends and they could not keep the Deck. They then retreated to the *Somersets* Tender who lay by for that purpose.

Sunday 28 at 3 A M the Tide leaving her [the *Diana*] quite dry the Rebels Ventured on Board, Plundered her and set her on fire. The Marines took poste upon the Island for that night, and when all was over were reinforced with 200 Men from the Garison. The Tender after seeing no Possability of saving the *Diana* slip'd and came up the Harbour.

at 12 the *Cereberus*' Quarter Deck Guns were sent to the Island and at 6 two field Pieces from the Shore. they Fired several times at the Rebels on the Continent

Monday 29 Light airs, and fair. Made the Signals for all boats, and sent them to take marines off Noddles's Island.

Tuesday 30 P M a Number of the Rebels came and set fire to a Dwelling House and some barns on Noddles Island fired several Shot to prevent their setting fire to our stores that were there.

Wednesday 31 A M made the Signal for all boats Mann'd and Arm'd which with a Party of Marines took all our stores off [Noddles Island]

June 1775 Remarks Boston Harbour

Thursday 1 Employd securing our stores. The Rebels set fire to our store houses on Noddles Island.

Saturday 3 Light airs and fair. Fired several times at the rebels, to prevent their entrenching on the island.

(The National Archives of England. ADM 51/720 Captain's Log HMS Preston (1774 Feb 2 – 1780 Oct 23) Kew, England; Clark, William Bell, Editor. 1964. *Naval Documents Of The American Revolution*. Vol. 1. Washington, D.C.: U. S. Government Printing Office.)

8.2. Remarks & Ca. Onboard the *Somerset*

May 1775 Moored in Boston Harbour

Saturday 27 P M the Admiral made the Signal for landing the Marines. landed our Marines on Noddle Island; at 7, two of our marines were brought onboard, being wounded by the Rebels & the *Diana* Schooner & *Britannia*, Tender, were attacked with Great Guns & small Arms by the Rebels

Sunday 28 A.M. Geo: Williams, Wm. Crocker Seamen, were brought onboard from the *Britannia*, the former Dead, the latter mortally wounded, so that he Died soon after. So the *Diana* Schooner was driven onshore by the Tide, it being calm; soon after the Crew was obliged to take to the Boats, and she was set on fire soon after by the Rebels: The Revd Mr. Troutbeck performed divine Service on board, and the two Seamen were buried.

June 1775 Moored in Boston Harbour

Saturday 10 A M fired one 18 Pr and one 9 Pr shotted, at the Rebels, on Noddle Island, who attempted to set fire to some Stores there; . . .

(The National Archives of England. ADM 51/906 Captain's Log HMS Somerset (1773 Sept 17 – 1778 Feb 17) Kew, England; Clark, William Bell, Editor. 1964. *Naval Documents Of The American Revolution*. Vol. 1. Washington, D.C.: U. S. Government Printing Office.)

8.3. Journal of His Majesty's Ship *Cerberus*, James Chads, Commanding

May 1775 Moor'd in Boston Harbour

Saturday 27 P M disembarkd our party of Marines P Signal & sent our Boats a shore Man'd and arm'd to Assist the Troops at 5 Sent Two of our 3pdrs & a party of Seamen a Shore wh Ammunition &c.

Sunday 28 AM Got Do [ammunition] on bd Empd Embarking the Marines; Fired at the rebles assembled and burning the Houses & Barns of Hay on Noddles Island

(The National Archives of England. ADM 51/181 Captain's Log HMS Cerberus (1770 Oct 1 – 1778 Aug 5) Kew, England; Clark, William Bell, Editor. 1964. *Naval Documents Of The American Revolution*. Vol. 1. Washington, D.C.: U. S. Government Printing Office.)

8.4. Journal of His Majesty's Ship *Glasgow*, Tyringham Howe, Commanding

May 1775 Moor'd in Boston Harbour

Saturday 27 The Rebels fired several Musquets at the Ship . . . at 3 P M the Adml made the Signal for all boats mann'd & arm'd to land the Marines on Noddles Island sent the longboat & pinnace with the Marines at 5 saw several houses on fire at the Island at 8 heard severall Vollies of small arms & field pieces fired

Sunday 28 at 3 A M saw houses on fire at the So. End of Bostn at 6 A M the longboat & pinnace return'd with one Man wounded brought the News the *Diana* armed Schoner was burnt by the Rebels Modr & Clear Wr P M sent part of the powder on Shore to Day Sailmakers empd. as before All Hands at Quarters

Wednesday 31 Modr & hazey at 2 P M the Rebels came on Noddle Island & fired all the houses by which means was lost at the Cooperage house, Butts twelve, punches fifteen, Hh'ds ten, Barrells twelve, all full hoopd with 134 Iron hoops & all the Coopers tools

(The National Archives of England. ADM 51/398 Captains Log HMS Glasgow (1775 Apr 21 – 1776 Aug 30) Kew, England; Clark, William Bell, Editor. 1964. *Naval Documents Of The American Revolution*. Vol. 1. Washington, D.C.: U. S. Government Printing Office.)

8.5. Master's Log of His Majesty's Ship *Mercury*

May 1775 [Nantasket Road]

Saturd 27 Came in His Maj's Schooner Diana Modt Breezes and fair Wr Empd Making Boarding Nettings.

P M heard the Report of Several [guns] towards Pudon [Pudding] Gut Sent the Longboat Mand & Armed to Se[e] the Ocasion of it heard the Report of Volley of Smal Arms & Great guns till a 11 a Clock at ½ past 11 the Longboat Retd by which we found the guns we heard was the Marines and Diana beating the Rabbls of[f] Nodels Isld.

(The National Archives of England. ADM 52/1866 Master's Log HMS Mercury (1774 Jan 13 – 1777 Feb 13) Kew, England; Clark, William Bell, Editor. 1964. *Naval Documents Of The American Revolution*. Vol. 1. Washington, D.C.: U. S. Government Printing Office.)

9. After Action Reports, Correspondence, Miscellaneous and Newspaper Accounts

9.1. Vice Admiral Samuel Graves to Philip Stephens⁴⁰

Preston Boston January 8th 1775

...I have taken upon me to purchase the *Diana* Schooner of 120 Tons, about eight Months old, so exceedingly well built that she is allowed to be the best Vessel of the Kind that has been yet in the Kings Service, her first cost is £750 Sterling and as I have thought it best for his Majesty's Service that she should be an established armed Schooner, I have directed the necessary alterations to be made in her Hull, and for her to be fitted in all respects like other Vessels of her Class; She will have the *St Lawrence's* Guns. On this Occasion I have appointed Lieut. Thomas Graves of his Majesty's Ship *Lively* to command the *Diana* Schooner, and Mr William Lechmere of the *Preston* to be Lieutenant of the *Lively*. The *Diana* will soon be ready for Sea, and I shall send her to Rhode Island.

(Clark, William Bell, Editor. 1964. *Naval Documents Of The American Revolution*. Vol. 1. Washington, D.C.: U. S. Government Printing Office, 59-60.)

9.2. Vice Admiral Samuel Graves to Philip Stephens April 11, 1775⁴¹

Preston Boston 11th. April 1775

...I have also hired a small Sloop of 25 Tons which I have placed between Nodles Island and the Main near Winnisimmet Ferry; through this passage I find much Smuggling has been carried as it is extremely convenient and near to the two Towns. The small Sloop now placed there will answer every purpose of a much larger and more expensive Vessel. Frequent attempts are every week made to enter this Harbour, some in the night, and others upon various pretences of Distress, Ignorance and of bringing provision imagining that provisions might be brought in without complying with the mode prescribed by the Act of Parliament; and smuggling is carried to such a height, and so systematically followed, that without the

⁴⁰ Purchase of the HMS Diana.

⁴¹ This probably refers to the purchase of the HMS Britannia. This sloop was placed to interdict naval traffic at Winnisimmet Ferry and in and out of Chelsea Creek. Philip Stevens was the Secretary of the Admiralty.

utmost Vigilance and care, there is no detecting them to Condemnation: We have however caught several lately.

(Clark, William Bell, Editor. 1964. *Naval Documents Of The American Revolution*. Vol. 1. Washington, D.C.: U. S. Government Printing Office, 59-60.)

9.3. H. Prentiss to Oliver Wendell May 12, 1775 Regarding Livestock Hog Island

Charlestown May 12th 1775

Dear Sir,

I've been here ever since last Sabath day waiting for a Pass into Town or for your things to come over neither of which I am able to obtain yet. Master Lovell wrote me last Evening that he had ye Promise of a Pass for me which I believe is all I shall get. The trouble & Difficulty of getting a Pass is much greater than I cou'd possibly Conceive, & cou'd a Pass be obtained I shou'd almost as lives (did the furniture belong to me), leave it in the Town to take the common fate of things there. I must beg you to take a ride this way I think your interest demands it. I would not desire you to come this way if there was the least danger. You may come to Charlestown with the Greatest safety. Coll. Marshall sent over here to know what Stock you had upon the Island, upon which I sent Mingo to the Island to bring an account to me. He tells me Mr. Harris is very uneasy, the people from the Men of War frequently go to the Island to Buy fresh Provision, his own safety obliges him to sell to them, on the other Hand the Committee of Safety have thretned if he sells anything to the Army or Navy, that they will take all the Cattle from the Island, & our folks tell him they shall handle him very rufly. Mrs. Philips Furniture came over the Day before yesterday, & Mrs. Hunt came with them. Our other friends are still confin'd in town but enjoy good Health. Inclosed is a Letter from Master James Lovell. Please to present my bet regards to Mrs. Wendell & accept the same yourself, & Love to Mr. Ned and Miss Sally. Yr. friend & c.

H. Prentiss.

(Directed) To Mr. Oliver Wendell

To be left att Mr. Jona. Jacksons

Newbury Port.

(Endorsed) Charlestown, May, 1775

H. Prentiss Letter.

("Prentiss to Wendell May 12, 1775." In *Essex Institute Historical Collections* Vol. 13 1877 Salem: Essex Institute, 181.)

9.4. General Artemas Ward Letter October 30, 1775⁴²

October 30, 1775

⁴² This letter proves that Putnam was in command of the raid on Noddle's Island and Hog Island that led to the Battle of Chelsea Creek. He likely directed subsequent the subsequent actions as well.

...Some have said hard things of the officers belonging to this Colony, and despised them, but I think as mean as they have represented time to be, there has been no one action with the enemy, which has not been conducted by an officer of this Colony, except that at Chelsea, which was conducted by Gen. Putnam...

Artemas Ward

(“General Artemas Ward Letter October 30, 1775.” In *Proceedings of the Massachusetts Historical* Vol. 43 1909-1910, 96.)

9.5. General Israel Putnam’s Declaration September 28, 1786⁴³

General Putnam’s declaration

These may Certify that in the year 1775 When the American Army surrounded the town of Boston, that I was Appointed General and _____ in Command of the Connecticut forces. And being informed of the large Quantity of Stocks and provisions that McWilliams usually kept on Noddle Island and the Bennifitts the Enemy would Receive there from if not removed – it was unanimously agreed among the general officers that it was absolutely necessary to remove the Stock and Effects from the said Island in order to prevent the Enemy receiving any Supplys of provitions &c &c. And accordingly a party of troops were Detached for the above purpose and put under my Command. And upon our Entring Upon said Island for the purpose aforesaid. The Enemy Disscovering us made such a continual fire from their Shiping, that it was impossable to remove the Grain Provisions Liquers and other stores that ware in the housses and callers next to the Enemys Ships – And it was agreed among the General Officers that if the Stocks and provitions to others E_____ could not be got off the said Island without grate hazzard and loss of the American troops, that in that case, it would be Expediant to Destroy or Consume the farme, which was Accordingly Done by burning the housses and provitions, &c &c - we also took a large numbers of horses off said Island and put them into the Publick Stables for ye Use of the Army – Also – a further numbers of hoses that could not be caut by our troops, we ware obligde to Shoot in order to parvent there falling into the hands of the Enemy.

Boston Sept. 28, 1786

Israel Putnam

(“General Israel Putnam’s Declaration September 28, 1786” In Tentindo, Vincent and Marylyn Jones. 1978. *Battle of Chelsea Creek May 27, 1775 (Graves’ Misfortune)*. Revere: Revere Historical Commission, 140-141.)

9.6. General Thomas Gage’s Warning to Vice Admiral Graves May 25, 1775

General Thomas Gage to Vice Admiral Samuel Graves

[Boston] 25th May 1775

Sir

⁴³ In a letter date September 28, 1775, Israel Putnam discussed how the actions along Chelsea Creek came about. He was verbally ordered to undertake the operation during a council of war that likely took place on the night of May 24, or in the early morning hours of May 25. Putnam goes on to describe how they were to carry out the task. General Thomas Gage heard of this plan from his spies and warned Vice Admiral Graves.

I have this moment received Information that the Rebels intend this Night to destroy, and carry off all the Stock & on Noddles Island, for no reason but because the owners having sold them for the Kings Use: I therefore give you this Intelligence that you may please to order the guard boats to be particularly Attentive and to take such Other Measures as you may think Necessary for this night.

(Gage, General Thomas. "General Thomas Gage to Vice Admiral Samuel Graves 25 May 1775." In Clark, William Bell, editor. 1964. *Naval Documents Of The American Revolution* Vol. 1 Washington, DC: US Navy Department, 523.)

9.7. Vice Admiral Samuel Graves' Reply to Gage's Warning May 25, 1775

Vice Admiral Samuel Graves to General Thomas Gage

Boston 25 May 1775 9 at Night

Sir

The Guard boats have orders to keep the strictest look out; and I will direct an additional One to row tonight as high up as possible between Noddles Island the Main, to Alarm in Case any attempt is made by Rebels to go over; but I beg leave to observe to your Excellency that in My opinion A Guard upon the Island is the Most probably Means of preserving the Hay from being destroyed; However your Excellency May be assured all that the Ships can do shall be done to prevent the Rebels effecting their Design. I have the Honor to be with great regard and Esteem Sir [&c.]

Sam Graves

(Graves, Samuel. "Vice Admiral Samuel Graves to General Thomas Gage 25 May 1775." In Clark, William Bell, editor. 1964. *Naval Documents Of The American Revolution* Vol. 1 Washington, DC: US Navy Department, 523.)

9.8. Colonel Doolittle's Order May 30, 1775

To Capt. Nathan Fuller you are hereby Directed to Collect all the Cattle horses (excepted) and Sheep brought off the Noddle Island yesterday and this Day and proceed with them to head Quarters unless you receive Counter order from the General and proceed with Caution and not drive hard as the Sheep are Very Much Worried in Getting from the Island. Taking forty five min for yours Efeont-May the 30 1775

E-----m Doolittle Coll-----

A True Copy

Nathan Fuller

Thefe certify that we the subscribers Did Collect all the Cattle and Sheep that we could find above mentioned on the Said 30th Day of May 1775 and Deliver the Same at head Quarters in Cambridge and Never New What became of them afterwards.

Nathan Fuller

Capt----and Lieut.
at that time

John George

N.B we also remember that ----- a Number of Troops Brought off Said Island But ----- not P----- to Take the Change off but never left with the party that Staged still under Col Doolittles Command

(“Colonel Doolittle’s Order to Nathan Fuller May 30, 1775” In Tentindo, Vincent and Marylyn Jones. 1978. *Battle of Chelsea Creek May 27, 1775 (Graves’ Misfortune)*. Revere: Revere Historical Commission, 138.)

9.9. Report to the Massachusetts Committee of Safety of the Battle on Noddle’s Island

On the 27th inst. [May] as a Party of the Massachusetts forces together with a Party of new Hampshire Forces, in all about 600 Men were attempting to bring of(f) the Stock upon hog Island, & about 30 Men upon Noddles Island were doing the same, when about a hundred Regulars landed upon the last mentioned Island, had pursued our Men, till they had got safely back to hog Island – then the Regulars began to fire very briskly by Platoons upon our Men –

In the mean Time an armed Schooner (mounting four 6 Pounders & 12 Swivels with a Number of Barges came up to hog Island to prevent our People leaving sd. Island, But to no Purpose After this she attempted to return back to the Place where she was stationd at Winisimet, & five or 6 Minutes would have secured her. But our Men put in a heavy fire of small Arms upon several Barges which were towing her back, for there was little Wind & flood Tide; & two 3 Pounders coming to Hand that Instant, began to play upon them, & soon obliged the Barges to quit her, & carry of[f] her Crew – after which Fire was set to her, altho the Barges exerted themselves very vigorously to prevent it She was burnt upon the Ways of Winisimet Ferry –

We have not lost a single Life, altho the Ingagement was very warm from the armed Schooner, an armed Sloop that lay within reach of small Arms, from one or two twelve Pounders on Noddles Island, & from the Barges which were all fixed with Swivels – Hog Island was stript of its Stock, & some were taken from Noddles Island by our Forces Two or three Persons only, of our Men, were wounded, but not mortally – How many of the Enemy were killed & wounded we cannot ascertain – Since which we have got into our Hands all in the Schooner that was not destroyed by Fire.

(“Report to the Massachuseets Committee of Safety of the Battle on Noddle’s Island.” Massachusetts State Archives Vol. 146 Page 131; Clark, William Bell, editor. 1964. *Naval Documents Of The American Revolution* Vol. 1 Washington, DC: US Navy Department, 545.)

9.10. “A Circumstantial Account of the Late Battle at Chelsea, Hog Island, & c.”

On Saturday last [May 27] a party of the American army at Cambridge, to the number of between 2 and 300 men, had orders to drive off the live stock from Hog and Noddle’s Island, which lie near Chelsea and Winnesimmet, on the N.E. side of Boston harbour, - From Chelsea to Hog Island, at low water, it is but about knee high, and from that to Noddle’s Island about the same – The stock on the former belonged to Mr. Oliver Wendell, at Boston, and Mr. Jonathan Jackson, at Newbury-Port; that on Noddle’s island was owned by Mr. ---- Williams, of Boston, who hires the Island.

About 11 o'clock, A.M. between 20 and 30 men went from Chelsea to Hog Island, and from thence to Noddle's Island, to drive off the stock which was there, but were interrupted by a schooner and a sloop, dispatched from the fleet in Boston harbour, and 40 marines, who had been stationed on the island to protect the livestock – However, they sent off 2 fine English stallions, 2 colts, and 3 cows; killed 15 horses, 2 colts, and 3 cows, burnt a large barn, full of salt hay, and an old farmhouse: By this time they were fired on from the schooner and sloop, and a large number of marines in boats, sent from the several men of war; upon which they retreated to a ditch on the marsh, and kept themselves undiscovered, till they had an opportunity to fire on the marines, when they shot down two dead, and wounded two more, one of whom died soon after. They then retreated to Hog Island, where they were joined by the remainder of their party from Chelsea, and drove off all the stock thereon, viz. between 3 and 400 sheep and lambs, some cows, horses, &c.

During this, there were firings between the provincials and the schooner, Sloop boats, and marines on the other island. – Having cleared Hog Island, the provincials drew up on Chelsea Neck, and sent for a reinforcement of 300 men, and 2 pieces of cannon (four pounders) which arrived about 9 o'clock in the evening; soon after which, General [Israel] Putnam went down and hailed the schooner, and told the people that, if they would submit, they should have good quarters, which the schooner returned with 2 cannon shot; this was immediately answered with 2 cannon from the provincials: - Upon this a very heavy fire ensued from both sides, which lasted until 11 o'clock at night, when the fire from the schooner ceased, the fire from the shore being so hot, that her people were obliged to quit her, and take to the boats, a great number of which had been sent from the ships to their assistance, and also a larger reinforcement of marines, sent to Noddle's Island, with 2 twelve pounders.

The schooner being thus left, drove ashore, where about break of day, the provincials carried some hay under her stern, and set her on fire, the sloop keeping up a small fire upon them; at which time a heavy cannonading was begun, at Noddle's Island hill, with the 12 pounders upon the provincials; also General Putnam kept a heavy fire upon the sloop, which disabled her much, and killed many of her men, so that she was obliged to be tow'd off by the boats, when the firing ceased, excepting a few shot which were exchanged between the party at Chelsea and the marines on Noddle's Island. – Thus ended this long action, without the loss of one provincial, and only four wounded by the bursting of his own gun, another only lost his little finger. – The loss of the enemy amounted to 30 killed and 50 wounded. – The provincials took out of the schooner 4 double fortified 4 pounders, twelve swivels, chief of her rigging and sails, many clothes, some money, &c. which the sailors and marines left behind, they having quitted in great haste.

("A Circumstantial Account of the Late Battle at Chelsea, Hog Island, &c." In St. Clair Clarke, M. and Peter Force. 1837. *American Archives: Fourth Series, Containing A Documentary History Of The English Colonies In North America, From The King's Message To Parliament, Of March 4, 1744, To The Declaration Of Independence By The United States*. Series 4 Vol. 2. Washington, 719.)

9.11. Vice Admiral Samuel Graves to Philip Stephens Jun 7, 1775⁴⁴

Preston Boston 7 June 1775

The Rebels pursuing their avowed design of cutting off possible Supply to the Army and Navy, and of destroying what they cannot carry away, burnt a great deal of Hay on Hog Island the 27th of last month; a few hours after they landed on Noddles Island not only to burn the Hay thereon bought for the Army, but also to set fire to a Store house, hired when the *Glasgow* was ashore, in which I had deposited two large Cargoes of Lumber, Board and Spars, until an Opportunity offered of sending part of each to Halifax. In the Store house was also many other Articles that the Store Schooner could not conveniently hold. The preservation of all these became of great Consequence, not altogether from their intrinsic Value, but from the almost impossibility of replacing them at this Juncture. On Noddles Island, besides the Hay and stores just mentioned, were above 600 Sheep, several milch Cows and a Number of Horses; the most part private property. It was absolutely requisite to prevent the destruction of the Stores, and if possible the Hay, Sheep &c: therefore upon observing the Rebels landed on Noddles Island, I ordered the *Diana* to sail immediately between it and the Main, and get up as high as possible to prevent their Escape, and I also directed a party of Marines to be landed for the same purpose: there was no time to be lost, and assistance from the Army could not immediately be had.

The *Diana* entered the River between three and four in the Afternoon at low water, and proceeded to Hog Island with some interruption from the Rebels on all Sides. The Number on Hog and Noddles Islands were computed at 700 men, Parties of each occasionally attacked the *Diana*, but they were all obliged to quit Noddles Island without doing the intended Mischief. This effected, as I had ordered Lieut. [Thomas] Graves not to remain in the River upon the Turn of the Tide, he began to come away: It fell calm; the Boats of the Squadron were ordered to tow the *Diana*: by the close of the Evening the whole Country was alarmed; General [Israel] Putnam had brought I am told full two thousand Men with two Field pieces from Cambridge, with which he lined the Shore and greatly annoyed the *Diana*. The Marines from the Squadron were landed on the Island with two Pounders from the *Cerberus*, and the General sent two pieces of Artillery; but it was impossible, tho' in sight of the Fleet, to give the schooner any other Assistance than by Boats to tow her out; her slow progress by this means unavoidable exposed her to the Enemy; the Calm continued, it grew almost dark, the fire of the Rebels increased, and between 11 and 12 at Night she unfortunately got aground upon the Ferry Ways at Winnisimmet, and the Tide ebbing fast it almost instantly became impossible to move her, although every means was tried to get her off; about 3 in the Morning she fell over, so that they were obliged to quit her and go into the *Britannia* armed Sloop, who had been sent to their Assistance.

⁴⁴ This letter from Vice Admiral Graves to Philip Stephens, Secretary of the Admiralty was the cover letter accompanying the Minutes of the Court Martial of Lieutenant Graves. In is the Royal Navy's after action report.

In this Sloop they renewed the fight, which had continued with little intermission from 4 o’Clock; but, as the Schooner was by this time dry, the Rebels set her on fire and entirely destroyed her. In the *Somersets* Boat two Men were killed and two wounded; several were wounded in the Schooner and other Boats.

I transmit the Sentence of a Court Martial held upon the Commander, Officers and Crew of the said Schooner on this occasion. The very honourable Acquittal of the Commander of the *Diana* by the Court, I make no doubt will be satisfactory to their Lordships. Several of the Members saw part of the Action. The Situation of the Combatants afforded me also an opportunity of hearing their Discharges at each other and for some time of seeing the Battle.

The concurrent Testimony of those immediately concerned, of the nearest Spectators, and indeed the general Voice, authorize me to assure their Lordships of the perseverance and good Conduct of Lieut. Graves the Commander of the *Diana* in this Action, which lasted nearly eleven hours. I beg you will also represent to their Lordships, that it being very warm Weather, the far greater part of the Officers and people were in their Shirts, that the necessity for quitting the Schooner was urgent, and that it was morally impossible to save a single Article; with the loss of the Kings Schooner therefore they lost every thing they possessed on Board her.

I submit to their Consideration that as the Schooner was bravely defended to the last moment, against a very superior Enemy, the Officers and Crew should be indemnified for their Losses. It will operate as an Encouragement and be an Example to the whole Fleet to defend his Majesty’s Ships and Vessels to the last Extremity, even against great Superiority of Numbers; and ought not be drawn into precedent, except in extraordinary cases like this and the *Gaspee’s* at Rhode Island, The Commander of which received very honorable Marks of their Lordships appreciation of his Conduct, and the Officers and Crew were I am told also severally recompenced. I am & c.

Sam Graves

(“Vice Admiral Samuel Graves to Philip Stephens June 7, 1775.” In Clark, William Bell, editor. 1964. *Naval Documents Of The American Revolution* Vol. 1 Washington, DC: US Navy Department, 622-623.)

9.12. William Miller to Wife May 29, 1775

“A letter by William Miller regarding the “Action at Chelsey”

Rhode Island Camp in Roxbury
May 29th 1775-----

Dear Wife we were yesterday and the Night before last under arms which was Occasioned by an Engagement Colonel putnam With about 250 Men had with a Tousand Regulars the Engagement began at “half after nine O’clock on Saturday Night and lasted till Dahy Light when Coll putnam Returned to the Head Quarters at Salem having Burnt an Ar-med Sconer and Taken 16 pieces of Small Cannon kill’d 13 of the Horses that Lately arrived from England said to be for the Light Horse and Taken 17 More Coll. putnam had not a Man Killed and only three Men Wounded How many of the Regulars were killed we Cannot Learn only that there were Discovered in the Action three Regulars Killed and it is Thought

Numbers more even Slain. The place of Action was at Chelsey near inny-simmit ferry Sixteen Miles from this place (by land) when we first heard the firings which was very Brisk. I mustered my forces which were about 240 at the first Alarm Not Knowing but it was a General Attack and Sent off Expresses forward toward the Enemy Sent out Several Companies to Reconocer who went forward until they were Informed where the fire was and were Satisfied their Help was not wanted (some went Down Head Quarters) & in the morning the Fire Renewing I marched Down with all my men but a few who I left behind to Guard the Incampment & Magasine went to Head Quarters for Orders to go forward were within Sight of the Ennemies fire but the General Thinking it Best for me to Return and Refresh my men and hold my people in Readiness and Soon after my Return Co. Hitchcock Co. Cornel Arrived Here and Took the Chief Command and toward Night Major Sherburn Arrived Here Since which Several Companies are Arrived we heard a Number of Cannon fired toward Chelsey Last Evening but have not Learn what they have Done where I should be glad if you would Send me Some Linning Such as Shirts ----- when you have them Ready. if you want to Send any thing to me Such as Shoes or any thing Else you will pleas to have them Bundled up and a paper pasted on the Bundle and a Letter Wrote Ready

I am your Loving Husband
William T. Miller

(“A letter by William Miller regarding the “Action at Chelsey.” In Tentindo, Vincent and Marylyn Jones. 1978. *Battle of Chelsea Creek May 27, 1775 (Graves’ Misfortune)*. Revere: Revere Historical Commission, 101.)

9.13. General Thomas Gage to Lord Dartmouth June 12, 1775

To Dartmouth

Boston June 12th 1775

...The rebels have been burning Houses and driving Sheep off an Island that has an easy Communication with the Main, which drew on a Skirmish with some Marines who drove them away, but an armed Schooner that had been Sent between the Island and the Main Land, became exposed to a heavy Fire of Small Arms and two Pieces of Cannon, and unfortunately got on Shore at high Water: She was protected for a time by two Small Guns from the Ships, and two Field Pieces, but there was no Possibility of Saving her; for as the Tide fell she was left quite dry, and burned. Two Men were killed, and a few Wounded.

(“General Thomas Gage to Lord Dartmouth June 12, 1775.” In Gage, General Thomas. 1969. *The Correspondence Of General Thomas Gage with the Secretaries of State 1763-1775* Compiled and Edited by Clarence Edwin Carter. Vol. 1 North Haven: Archon Books, 405.)

9.14. The Massachusetts and Boston Weekly Gazette or Newsletter June 1, 1775

Loyalist Account of the Noddle’s Island Action

Last Saturday afternoon a number of country people landed on the bank of Noddle’s Island and set fire to several buildings on that part of the island. In consequence of which a detachment of marines was landed upon the island. And in the Evening the Schooner Diana

commanded by Thomas Graves, Esq. attempted to fail towards the back of the island, but the tide was low she was no able to effect it, and in her return from thence, keeping nigh to the shore, she accidently ran upon Chelsea ferryways. The continual fire of the country people from the adjacent halls and the _____ leaving her in such a manner that she heel'd, rendering it impossible to get her off. The accordingly left her and retired on board a sloop, which, with the Schooner had for several hours kept a continual firing on the country people; but the situation of the place was such, that they fought under the greatest disadvantages after they had left the Schooner, she was set on fire by the country people ____ From half past 9 o' clock till dawn light there was a firing between the troops on the island and the people on the opposite fide. The loss sustained on either fide by what we can learn is but very inconsiderable ____ the troops left the island and returned to town on Sunday morning ____ Some of the country people landed on the island again on Monday and set fire to several other buildings, and on Tuesday they set fire to Mr. William's dwelling house, which with everything in it was entirely consumed. (testation of the invaders of private property) have driven a worthy gentleman and his family from their habitations, and reduc'd them from a state of affluence to a dependence on the liberality of their friends.

("The Massachusetts and Boston Weekly Gazette or Newsletter June 1, 1775." In Tentindo, Vincent and Marylyn Jones. 1978. *Battle of Chelsea Creek May 27, 1775 (Graves' Misfortune)*. Revere: Revere Historical Commission, 112-113.)

9.15. New Hampshire Gazette June 2, 1775

Portsmouth, May 29, 1775

By a Gentlemen this Day from Cambridge we have the following Important Intelligence, who was an Eye witness to the whole Transaction, viz. – On Saturday last afternoon, between Five and Fix o' clock, a party of the New Hampshire Troops, under the command of Col. STARKS, went to Hog-Island, took from thence Four Hundred Sheep, belonging to General Gage, which 'tis said was stole off the other islands near by, and deposited there; - from thence proceeded to Noddle's Island, being reinforced by General Putnam, and there killed sevin Horses, and took one off alive; also killed divers horn Cattle, and took off several of them alive, which had also been stole. – During this Tranfaction, the Admiral hoisted a signal given by a Gun from an armed Schooner at Anchor near Winnisimmet Ferry Ways. – Our People with two Field Pieces staying on said Schooner obliged them to get into the Hold of the Vessel, til they obtained Relief – the Schooner in the Fray, and endeavoring to get off, ran on to the Ferry Ways, and after the People had got out of her, the Provincials rolled Bundles of Hay down to her, took out two Cannon, set her on fire and consumed her.

The Engagement continued the whole night, incessantly Firing notwithstanding we had but three wounded on our Side, - As there was a warm Fire from us upon those on the Land, as well as on the Barges, which were Eleven in Number, and full of Men, no Doubt they had sustained a considerable Loss. Upon the first approach of Our People at Nottle's – Island, the Regular Guards all took to their Heels, and ran, as if the Devil drove them – The Number we cannot learn; an armed Sloop continually firing upon our Men. – In this brave action Col. PUTNAM headed his Men up to his Middle in Mud and Water, and kept his Ground with all

his Men. Capt. Foster, who was Commander of the Field Pieces, behaved gallantly during the whole Engagement. We had a thousand Men with the Reinforcement.

The whole of the Forenoon, the next Day, being Sunday, the Somerset Man of War was continually Firing at the People on Chelsea Side, who came in great Numbers to see what had happened and as our Informant left Camp yesterday noon we cannot reiterate anything further, except that the Somerset kept on firing when he came away. He also informs, that there were no passes granted to the inhabitants 8000 left/ 5000 glad to go yet cannot. In addition to the above we hear that on Monday afternoon at 5 o' clock 200 of the Provincials went down to Nottle's island again and took off 216 Sheep more, 17 Horses, and several Head of Cattle, set all the Barns on fire in which were a vast quantity of screwed Hay belonging to the General, and though a few Guns were fired none of our Men received any Damages. 'Tis said in the above Engagement, between 2 and 300 Marines and Regulars were killed and wounded and that a Place was dug in Boston 25 square to bury their Dead, and that they had between 20 to 30 Barges full of Marines and Sailors.

(New Hampshire Gazette June 2, 1775. Microforms, Dimond Library, University of New Hampshire, Durham, New Hampshire.)

9.16. Connecticut Gazette June, 3, 1775

Connecticut Gazette, Saturday, June 3, 1775

New-London, June 2.

A Gentleman who was in Boston at the Time of the above Engagement, and whose Intelligence may be relied on, informs, that Ten Regulars were buried there last Sunday Evening [May 28], who were killed in the Engagement. 'Tis said they had about 30 killed, in the whole, and a greater Number wounded. - Seven Horses and several Cattle were also killed.

During the Action the Regulars were several Times reinforced: They amounted to about 1000 Men, and the Provincials to 700; the latter were under the command of Gen. [Israel] Putnam. It is supposed our People had a fascine Battery, made with bundles of press'd Hay, by their meeting with so little Damage.

When the Schooner blew up, her Sails fell into the Water, by which Means they were saved by our People, as also her Rigging, &c.

She was the largest Schooner in the King's Service, on the North-American Station.

The Stock on the Island belonged to the Inhabitants of Boston, and our Attempt to take off the same was supposed to be in Consequence of the Owners Desire.

("The Connecticut Gazette June 3, 1775." In Clark, William Bell, editor. 1964. *Naval Documents Of The American Revolution* Vol. 1 Washington, DC: US Navy Department, 602-603.)

9.17. Narrative of Vice Admiral Samuel Graves

[Preston Boston] 29th [May 1775]

The Rebels burned the only Dwelling house on Noddles Island, which being the property of a notorious Rebel then in Arms, was not much regarded. But it appearing that they were inclined to burn and destroy every thing likely to be useful to the Army and Navy, and to do them all the Mischief in their power, the Admiral thought it proper to order the *Somerset* to drop further down the Harbour and anchor where she could come to sail at any time of Tide.

The Ship *Champion* arrived laden with Wheat and Flour, having been manned and sent for Boston by Captain [John] Linzee of the *Falcon*.

(Graves, Samuel. "Narrative Of Vice Admiral Samuel Graves 29 May 1775." In Clark, William Bell, editor. 1964. *Naval Documents Of The American Revolution* Vol. 1 Washington, DC: US Navy Department, 557.)

9.18. Vice Admiral Samuel Graves to Philip Stephens June 16, 1775

Preston Boston 16 June 1775

... The Rebels landed again the 29th upon Noddles Island, drove off the Sheep and Cattle and entirely destroyed all the Dwellings and Outhouses, Barns, Stables and Hay on the Island; We have saved great part of the Kings Stored, but some are unavoidably lost. Among the Houses destroyed by the Rebels are those mentioned in my Letter January 8 to be hired for the use of the *Glasgow* when she was repaired; finding they would be very useful for holding Tar, Pitch, Junk, Lumber and many other Articles the Store Schooner could not conveniently keep with the other Stores necessary for the Squadron, I continued to rent them until they were destroyed as above mentioned.

(Graves, Samuel. "Vice Admiral Samuel Graves to Philip Stephens 16 June 1775." In Clark, William Bell, editor. 1964. *Naval Documents Of The American Revolution* Vol. 1 Washington, DC: US Navy Department, 690.)

9.19. Newspaper Account of the Action at Noddle's Island, Hog Island and Chelsea

Cambridge – June 1

We are well informed, that a few Days after the Battle of Lexington, the Regular troops stole away all the Cattle, Sheep, hay, etc. from Governor's Island and Thompson's Island in Boston Harbor.

On the 27th ULT as a Party of the Massachusetts Forces together with a Party of the New Hampshire Forces in all about 600 were attempting to bring off the Stock upon Hog Island and about 30 Men upon Hog Island and about 30 Men upon Noddell's Island were doing the same about a hundred Regulars landed upon the last mentioned and suisned our Men till they had got safety back to Hog Island and then the Regulars began to fire very briskly by Platoons upon our Men, in the mean time, an armed Schooner, with a Number of Barges came up to Hog Island to prevent our People's leaving said island, which she could not effect; after that several Barges were towing her back to her Station as there was little Wind and flood tide; Our People put in a heavy Fire of small Arms upon the Barges; and two 6 Pounders coming up to our assistance began to play upon them and soon obliged the Barges to quit her and carry off her Crew: After which our People set Fire to her, although the Barges exerted themselves very vigoursly to prevent it. She was burnt upon the way of Winisimet Ferry.

We have not lost a single Life although the Engagement was very warm from the armed Schooner (which mounted four 6 Pounders and 12 Swivels) from an armed Sloop that lay within Reech of Small Arms, from on or two 12 Pounders upon Noddle's Island and from the Barges, which were all fixed with Swivels.

Hog Island was stripped of its Stock and same was taken from Noddle's Island. Two or three Persons of our Men were wounded but not mortally. How many of the Enemy were killed and wounded we cannot ascertain. We have got into our Hands all in the Schooner that was not destroyed by Fire.

We have to inform our Friends that from the above attempt to remove the live Stock from the Islands, it has been actually done five or six hundred Sheep and Lambs, upwards of 20 head of Cattle and a number of horfes have been removed to the main Land.

Perhaps history cannot furnish us with a more miraculous interpretation of divine Providence; - Although our Enemies kept a warm fire, both from their cannon and small Arms, yet we have but three wounded: neighter of them supposed to mortal. (By way of Caution, we would inform the Public that one of the Captains that was killed in the late Engagement at Concord, was killed by his own Countrymen. This was the unhappy Consequence of firing at two great a Distance.) We still beg most earnest and constant prayer of our pious friends that our heads may always be covered in the day of battle. The Lord is a man of war, let salvation be ascribed to the Lord.

Our enemies in Boston, we are informed, are very confident of having made a great slaughter in the above engagement. They report various accounts of the number of our men whom they killed and wounded, some of them are so moderate as to mention only 2 or 300h, others of them make our lofs amount to about 600.

[Published in the New England Chronicle or Essex Gazette, May 25 to June 1, 1775, the Boston Gazette, June 5, The New Hampshire and Historical Gazette and Chronicle, June 9, the Essex Journal and Merrimack Packet, June 3.]

(Tentindo, Vincent and Marylyn Jones. 1978. *Battle of Chelsea Creek May 27, 1775 (Graves' Misfortune)*. Revere: Revere Historical Commission, 109-110.)

9.20. Extract of a Letter from Falmouth, Casco-Bay, Dated June 4, 1775⁴⁵

4 June (Sunday)

Capt. -----, (who on his passage to New-York from this place with a load of spars, was lately seized by Admiral Greaves and carried into Boston) returned here last Thursday Evening. He says he was at the wharf at Noddle's-island when the battle began, and has given us a particular account of the same. He says the sloop near Winnisimmit, that had the first brush, cut or slipped her cables, and came and fastened to his stern: He was shocked to see the blood running out of the scuppers; there was a number of dead and wounded lying on the deck, but the survivors did not care to tell how many. The *Diana* schooner next engaged, and the master of her told Capt. -----, that guns never were better served than ours were, that not a shot missed him. I have not time to write you all he says. One man was carried on board for dead, but next morning came too, and had not the least wound about him; other were frightened almost to death, &c. and that there was an amazing difference in the looks and behaviour of the enemy after the battle, from what there was before; before there was nothing but noise and confusion, afterwards all were still and quiet, insomuch that you could hardly perceive that there was any fleet or army there. From the General down to the common soldier, they seemed to be in a great panic, were afraid to go to bed, for fear the yankees should kill them before morning.

(“Extract of a Letter from Falmouth, Casco-Bay, Dated June 4, 1775.” In Clark, William Bell, editor. 1964. *Naval Documents Of The American Revolution* Vol. 1 Washington, DC: US Navy Department, 606-607.)

9.21. Rivington's Royal Gazetteer June 3, 1775

Rivington's Royal Gazetteer

Providence, June 3, 1775

We are informed, that about twenty of the enemy were killed in the engagement at Noddle's and Hog Island, and forty or fifty wounded. Other accounts say, that upwards of fifty dead bodies were landed at Boston. Our people likewise killed seven horses, and brought off four others.

⁴⁵ The letters newspapers that follow add some validity to the rumors that the British covered up the true number of casualties they suffered during the Battle of Chelsea Creek.

(Tentindo, Vincent and Marylyn Jones. 1978. *Battle of Chelsea Creek May 27, 1775 (Graves' Misfortune)*. Revere: Revere Historical Commission, 111.)

9.22. Extract of a Letter from Watertown, June 4, 1775

Extract of a Letter from Watertown, June 4, 1775

We have had a smart engagement at Noddle's Island last Saturday week [May 27]; the Lord covered our heads in a wonderful manner in that day of battle. Although the balls flew like hail we never lost a single man, and had only three wounded; we took a large schooner [the *Diana*], killed about one hundred of their men, and took a large quantity of plunder, five hundred sheep, besides horses and horned cattle off the island: We took a boat and several men prisoners. Yesterday we burnt the house and barn that were on the island.

("Extract of a Letter from Watertown, June 4, 1775." In Clark, William Bell, editor. 1964. *Naval Documents Of The American Revolution* Vol. 1 Washington, DC: US Navy Department, 607.)

9.23. The Boston Gazette June 19, 1775

The Boston Gazette

Monday June 19, 1775

A Gentle men that left Boston about fix days ago asserts for fact that he saw landed on the long-Warf no less than 64 dead Men that had been killed by the Provincials at the late attack at Noddel's and Hog-Islands, as mentioned in our last.

("The Boston Gazette June 19, 1775." In Tentindo, Vincent and Marylyn Jones. 1978. *Battle of Chelsea Creek May 27, 1775 (Graves' Misfortune)*. Revere: Revere Historical Commission, 111.)

9.24. The Boston Gazette June 12, 1775

The Boston Gazette

Monday June 12, 1775

Saturday last the Provincial troops set Fire to the Store on Noddle's Island which was entirely consumed, no Building being now left standing in said island.

("The Boston Gazette June 12, 1775." In Tentindo, Vincent and Marylyn Jones. 1978. *Battle of Chelsea Creek May 27, 1775 (Graves' Misfortune)*. Revere: Revere Historical Commission, 111.)

9.25. Count De Guines to Count De Vergennes July 7, 1775

Count De Guines to Count De Vergennes

London, 7 July 1775

...In the morning of 27 May, around 11 o'clock, a party of provincials were carrying out their orders which took them from Chelsea to the Islands of Hogg and Noddle in order to remove the livestock from the said islands. They were interrupted on their way by a schooner and a corvette detached from the fleet stationed in front of Boston and by about forty marines who were under orders to keep watch over the live-stock. Nevertheless, the Provincials managed to take a few cows and horses, killed a few and set fire to a barn and a farm. Meanwhile, the two warships and a large detachment of marines from these ships which had been lowered in boats fired upon the Americans. The latter took refuge in a ditch near a marsh and remained hidden there until they had the opportunity to fire on the marines, which they did, killing three and wounding one of them. They proceeded then to the isle of Hogg where they were joined by the other members of their party and where they drove away all the live-stock: three or four hundred sheep, a few cows, horses, etc. Both camps kept on exchanging gunfire.

After cleaning up the Island of Hogg, the Provincials marched to the Point of Chelsea where they drew up in battle array and sent for a reinforcement of three hundred men and two four pounders. This reinforcement arrived around nine o'clock in the evening, and a while later, General Putnam shouted to the schooner saying to the men who manned this ship that if they wished to surrender they would be granted quarter. He was answered by two cannon shots which were immediately returned. Then violent firing opened on both sides which lasted until eleven o'clock in the evening when the schooner stopped firing. The crew had to abandon ship and take to the boats which had been sent in great number to their rescue along with a large detachment of marines which had taken position on the Island of Noddle with two twelve pounders.

Without her crew, the schooner ran aground and, at daybreak, the Provincials set fire to her. At this time the two twelve pounders opened a violent fire.

For his part, General Putnam blazed away at the corvette and battered her to such an extent that the greater part of her crew was killed and she had to be towed by boats. All firing ceased then except for a few random shots between Chelsea and Noddle Island.

During this long action, the Provincials did not lose a single man. They had only four wounded, one of them by his own gun which exploded. They removed from the Schooner four four pounders, twelve blunderbuss, most of her sails and rigging, also clothes and money, etc. On the other side there were 20. killed and fifty wounded.

(“Count De Guines to Count De Vergennes July 7, 1775.” In Clark, William Bell, editor. 1964. *Naval Documents Of The American Revolution* Vol. 1 Washington, DC: US Navy Department, 607.)

9.26. Extract of a Letter Dated June 1, 1775, From the Provincial Camp at Cambridge

“Extract of a Letter Dated June 1, 1775, From the Provincial Camp at Cambridge (The following Extract of a letter, dated the first of June instant, in the Provincial Camp, at Cambridge, from a gentleman of undoubted veracity and intelligence, gives a more authentic, and in many respects a more particular account of the late action...than any that has appeared in the public papers.”

New York Journal, June 15, 1775

When our people were engaged in taking the stock, &c. from Noddle’s and Hog-Islands, the king’s troops made an attack upon them. On Hog Island, the combat began about 5 o’ clock in the afternoon, and continued almost incessantly till midnight. The attack was made with cannon, swivels, and small arms, from an armed schooner, sloop, and eight or ten barges, upon our people, who had small arms only, but were very advantageously posted by Colonel (Israel) Putnam who got to them just in season to station and command them properly. He placed them in a ditch, up to their waists in water, and covered by the bank, to their necks: The Schooner, sloop and boats full of men, came within 12 or 15 rods of them, and gave our people a fine opportunity to place their shot well. About midnight the fire ceased a little, and our people retreated to the mainland, where they were soon after joined by Capt. (Thomas Waite) Foster with two-field pieces which were planted on the way tom Winnesmit ferry. At day light the combat was renewed, as the schooner passed the ferry way, she was briskly attacked by our people, with field pieces and small arms, which soon clearing the deck, she drifted on shore, where our people set fire to her, and she blew up, notwithstanding the utmost endeavors of the people in the boats, &c. to tow her off, and save her from destruction- In this they greatly exposed themselves much to our fire, and suffered greatly. When they found the schooner was lost, they with difficulty towed off the sloop much disabled, and retired to their den; and thus ended the combat, at about 7 o’ clock in the morning. In the afternoon, (Sunday) our people got out of the wreck, 12 four pounders, 6

swivels, and every thing else that was valuable , without molestation; they afterwards removed of destroyed from both the Islands, all the dtock, &c. viz. about 5 or 600 sheep, 30 horses, about as many cattle, a large quantity of hay, and burned all the barns and houses.

All this was done in sight, and as we may say, under the noses of the whole fleet and army in Boston, without molestation.-The killed of the enemy (viz. Gen.(Thomas) Gage's crew of enemies to the English constitution) they themselves allow to be more than 100, besides wounded; others, who have good opportunity to know, say, their killed and wounded, exceed 300, and I believe they have suffered as much as in their precipitate flight from Lexington, on the memorable 19th of April. Our killed none! wounded, three! Heaven apparently, and most evidently fights for us; covers our heads in the day of battle, and shields our people from the assaults of our common enemies. – What thanks can speak our gratitude. These interpostins, and our determined resolutions, may perhaps make our haughty enemies glad to quit their unjust possessions, for a cooler and more calm retreat in some distant quarter of the globe, and leave us peaceably to enjoy those rights and liberties which God in our nature has given as our inalienable right, and which they are mostly unjust endeavoring to wrest from us by violence.

(“Extract of a Letter Dated June 1, 1775, From the Provincial Camp at Cambridge.” In St. Clair Clarke, M. and Peter Force. 1837. *American Archives: Fourth Series, Containing A Documentary History Of The English Colonies In North America, From The King's Message To Parliament, Of March 4, 1744, To The Declaration Of Independence By The United States*. Series 4 Vol. 2. Washington, 874.)

9.27. Extract of a Letter from a Gentleman in Salem

“Extract of a Letter from a Gentleman in Salem to Another in This City [Philadelphia], Dated Tuesday, June 6, [1775]”

It is galling to the surly old Admiral, who, it seems, growls like a cur dog, that our people should burn one of his cutters under his nose, and take All the STOCK off the Islands, and burn the houses, barns, &c. on Noddle's island, in which affair they lost a great many men. Mr. ----- whose integrity, you know, may be relied upon, was in Boston at the time the dead were landed, and says they were obliged to dig a hole twenty five feet square to bury them in.

(“Extract of a Letter from a Gentleman in Salem to Another in This City [Philadelphia], Dated Tuesday, June 6, [1775].” In Clark, William Bell, editor. 1964. *Naval Documents Of The American Revolution* Vol. 1 Washington, DC: US Navy Department, 616.)

9.28. William Harris to Oliver Wendell June 26, 1775⁴⁶

⁴⁶ This letter demonstrates that livestock was still a matter of concern after the Battle of Chelsea Creek.

Chelsea 26 June 1775

Mr. Wendell

Sir, The people in Chelsea have been & are now moving their Effects away further back into the Country and it is the Opinion of all that we are in danger of another visit from the Regulars. I do wish if it is agreeable to your Judgement that you would give me Orders to Carry your Cattle further back for I am afraid that unless they are Remov'd you will lose them. I delivered some cows according to your order. I have gott some people to go on the Island & how the Corn & potatose & Garden to the halves & I do design, God willing, to mow what I can. The Cow that was Sent up last summer to M. Williams is Calved & the Calf is dead the Cow being hurt as I suppose. I should be Exceeding glad to be directed by you at this difficult time that I may know how to proceed for I should be Exceeding Sorry to see any further loss to you.

I am Sir your hun.ble Serv.t W.m Harris

(Directed) To Mr. Oliver Wendell in Kingstown.
To the Care of M. Appleton at Salem.

(“William Harris to Oliver Wendell June 26, 1775.” In Tentindo, Vincent and Marylyn Jones. 1978. *Battle of Chelsea Creek May 27, 1775 (Graves' Misfortune)*. Revere: Revere Historical Commission, 137.)

9.29. Extract of a letter from Boston, Dec. 13, 1775

We are now almost as much blocked up by the sea as we have been for these eight months by the land. By this opportunity you will receive a confirmation of the rebels having taken the Ordnance brig. This is a great loss to us and a great acquisition to them. The rebels have also just taken another vessel from Britain, valued at 10,000 l. loaded with necessaries for the army. These vessels have been carried into Cape Aren [Cape Ann], which is only seven leagues from the mouth of this harbour, and they were taken almost within sight of our Admiral's ship. yet there is nothing to prevent the rebels taking every vessel bound for this port; for though there are near twenty pendants flying in this harbour, I cannot find that there is one vessel cruising in the bay. Surely our Admiral cannot be allowed to remain here much longer a curse upon the garrison. We used to say here that the suite of our former General were intent on nothing but profit; but we have more reason to complain of our sea commander. All the summer while the sick and wounded were dying daily for want of fresh provisions, not a boat was permitted to fish in the harbour till Mr. -----, the Admiral's secretary, was softened down by a dollar from each boat. You may be sure we were not silent at this exaction, which was both impudent and barbarous, and after a long time got it abolished. But after this we found ourselves in a worse situation. As no dollars were paid, fishing passports wee with difficulty procured; the Admiral was never to be seen, and his

secretary was always busy; so that it often cost many days attendance before a single boat could have leave to fish. You may guess what execrations were poured forth against them by all sorts of people, the sick, the wounded, and the well, the army and the inhabitants. If a vessel was fitted out by the army for to sail in quest of fresh provisions, general Gage's desiring a pass was sufficient reason for a refusal; for the Admiral and his 'spouse entertained a mortal antipathy against the General and his Lady. On a second application the reply was, that such a pass was against the Port Bill. To this it was answered that the Port Bill was not passed to starve his Majesty's troops. In such messages as these, eight, ten days, or a fortnight, were lost, and a pass was at last granted on the General's absolutely demanding it for the sake of supplying the sick and wounded who were languishing in the hospitals. A vessel detained in this manner was taken by the rebels on her return from the Bay of Fundy, fully laden with live stock. She was taken by the first vessel fitted out by the rebels and must have come safe had she not been detained as above. The disagreement between the General and the Admiral first originated with their wives; both of whom led their husbands. Every plan of the Generals that miscarried afforded matter of laughter to the Admiral's family, who sneer'd and cried out, "Well, this is Mr. General's fine plan!" The General soon had his revenge, for Mr. Admiral himself undertook to defend Noddle's Island; but the rebels soon made him retreat, defeated his marines, burnt all the hay and barns, and carried off the live stock: Then he undertook to defend Long Island; there again he was defeated, and the women and children who resided there for their health carried off before his face: Then he undertook to defend the light house; there he suffered more disgrace than ever; it was burnt while he and his ships lay in full view: When the rebels had done their business they retired; upon which Mr. Admiral ventured to land a party of marines and a number of workmen to rebuild it; they were no sooner ashore than the rebels in their whale boats landed again on the island, and his marines and carpenters were killed or taken prisoners under his own guns. During all this Mr. and Mrs. General had their revenge, and they enjoyed it: all their cry was "Well! these are Mr. Admiral's fine plans!" In a few words our navy never made so disgraceful a figure. If our sea commander is not speedily recalled no service can be expected from our fleet. He has quarrelled with the General, the army, with all his own officers except his own hangers-on, with the Commissioners, and with all who had any business with him. After all I believe the man designs well; but his own wife says that a fit which he had on his arrival here has rendered him good for nothing.

("Extract of a letter from Boston, Dec. 13, 1775." In Willard, Margaret Wheeler, Editor. 1925. *Letters On The American Revolution 1774-1776*. Reprint Port Washington: Kennikat Press.)

10. Court Martial of Lieutenant Graves For The Loss of The HMS Diana

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At a Court Martial assembled and held on
Board His Majesty's Ship Somerset at Boston
in New England the 6th day of June 1775

Present

Edward Le Cras Esqr. Commander of His Majesty's Ship
Somerset and Senior Captain of His Majesty's Ships
and Vessels at Boston President

Captains Broderick Hartwell

James Chads

John Robinson

Tyringham Howe

who all being duly Sworn

The Court in pursuance of An Order
from Vice Admiral Graves Commander in Chief
of His Majesty's Ships and Vessels in North america
proceeded to enquire into the cause of the loss
of His Majesty's late armed Schooner Diana
which happened, in action with Rebels, on
the 27th day of May 1775 by the Schooner getting
aground upon the Ebb near Winnisimmet
Ferry in this Harbour where she was burnt
and entirely destroyed by the Rebels, And
Lieutenant Thomas Graves having declared
that he had not the least cause for Complaint
against any of the Officers or Crew belonging
to the said Schooner The Court proceeded to
try the said Lieutenant and having
strictly examined the rest of the Officers
and part of the Crew onboard the said
Schooner at the time she was engaged
as aforesaid and having also very
maturely weighed and considered the
whole of their Evidence are of Opinion that,
in the performance of the Service Lieutenant
Thomas Graves was ordered upon, he behaved
like a very brave and gallant officer, that
he did his utmost to annoy the Rebels, and
after the Schooner was ashore, to defend
and prevent her from being destroyed: The
Court do therefore Acquit the said Lieutenant
Thomas Graves, and the other Officers and
Crew belonging to her, of the loss of the
said Schooner; And they are hereby
acquitted accordingly.

Ed Le Cras

B. Hartwell
Joe Chads
J Robinson
Tyring – Howe

G Gefferina
Judge Advocate

Minutes of the Proceedings of a Court Martial assembled and held on board His Majesty's Ship Somerset at Boston in New England the 6th of June 1775 to enquire into the cause of the loss of His Majesty's late Armed Schooner Diana Lieut. Thomas Graves Commander on Sunday 28th May 1775 near Winnisimmet Ferry in Boston Harbour

Present

Edward Le Cras Esqr. Commander of His Majesty's Ship Somerset and Senior Captain of His Majesty's Ships and Vessels at Boston, President

Captain Brodk. Hartwell

James Chads

John Robinson

Tyringham Howe

Lieutenant Thomas Graves and all the Officers and People belonging to the late armed Schooner Diana being brought into Court attended by the Provost Martial and every other Person who thought proper to be present being admitted

The Court were Sworn agreeable to act of Parliament

The order for their assembling here unto annexed being first read, together with a Warrant from the President appointing Mr. George

Gefferina to execute the Office of Judge Advocate

on this occasion. The Judge advocate of the Fleet and his Deputy being absent. The Court first asked Lieutt.

Thomas Graves if he had any cause of Complaint against any of the Officers or Crew of His Maj's. late

Schooner before or at the time of the Action or

Since until that day, and the Said Lieutenant

declaring he has not but that on the contrary

they had all behaved themselves with great

bravery and obedience – The Court ordered all

persons belonging to the Schooner to withdraw

except – Mr. John Dawson the Master and then

proceeded to examine Evidences to enquire into

the Cause of the loss of the above Schooner

Mr. John Dawson Master of his Maj's. late Schooner Diana Sword

and examined as follows

Court ---- You have heard the order read for the Trial? Yes.

Court ---- Relate to the Court what circumstances you know from the time of your getting under weigh until the loss of the Schooner.

Ans - about 4 o'Clock in the afternoon of the 27th of May being Saturday, Lieut Graves came on board and

ordered us to get under weigh, we did so and sailed between Noddle Island and the Main – we saw a number of Armed men on the Island, Rebels who soon after fired upon a party of Marines or Soldiers on the said Island, Several of their shot came near us, I suppose intended for Us. Upon which we fired our Great Guns and Small arms at them, some time afterwards we saw the Rebels disperse imagined there was no farther occasion for the Schooner we turned back and in coming down near Winnisimmet Ferry received a Continual fire from the Rebels, which we returned as often as possible and when it grew dark, it fell calm it was Tide of Ebb, and imagining ourselves to be on the Main Side did our utmost endeavour, with the sails + by calling to the Boats of the Squadron who were towing us, to get her farther from the shore. The Tide notwithstanding set us on the ferry ways at Winnisimmet – The Rebels all this time keeping a very hot fire upon us from the Houses behind Walls and other Covers – as soon as we found the Schooner aground we carried out an anchor, brought the Hawser to the Windlass which was instantly manned with as many men as it would hold and began to heave finding she did not move, sounded arround her and fearing she would heel off to Port got three shore over directly and shored her, nevertheless as the tide left her she heeled so much that we could not stand to fire a gun upon Deck – and the Rebels still keeping a constant fire upon Us. It was now

now our opinion she would overset upon which the Lieutt told me he thought it was prudent for the people to quit her for the present and go on board the Britannia Sloop, who lay near us, In order to assist those on board her to keep off the Rebels till daylight, when he intended to return to the Schooner again and endeavor to get her off we accordingly all went on board the Britannia and about Midnight or I believe one in the Morning we perceived a great Smoke on board and imagined the Rebels had set her on fire, all this time we continued engaging from the Sloop – and about 2 or between two & three o’Clock she blew up.

Court ---- Do you apprehend if you had staid on board her You could have saved her or got her off? It was impossible.

Court ---- Was the Schooner dry at Low Water? Yes.

Court ---- How far was the Britannia from the Schooner?
ans. Not above a Cable’s Length.

The Evidence saying he knew nothing more and the Lieut having no questions to ask him he was ordered to withdraw.

Mr. Dashwood Bacon called into Court, Sworn, and Examined as follows Viz.

Court ---- You have heard the Admiral’s order read in Court for the Trial of Lieut Graves for the loss of the Diana Schooner? Yes.

Court ---- Relate to the Court all the Circumstances You know relative to her being lost.

Ansr. On our passing Winnisimmet Ferry about 10 days as on there was several shot fired at us from the Houses, when we got to Hog Island we found a great number of Men armed who fired at us we returned it immediately and stayed there engaging till between 8 and 9 o’Clock. We then run a Kedge anchor out with the assistance of the Boats of the Squadron towing a head proceeded to Winnisimmet ferry again, where we met with a very Sharp fire after the boats left us, she grounded a small time after we run an anchor out and endeavoured to get her off, we brought the Hawser to the Windlass and have with all the Strength we had but found it of no Service, she was fast aground Between 11 and 12 I believe we perceived

they had two field pieces which they fired very frequently; We Staid on board till it was impossible for a gun to bear or a man to Stand upon the deck, the shores that were placed to keep the Schooner up giving way she fell on her side – we then went on board the Britannia Sloop and renewed the engagement keeping up a Smart fire upon the Rebels.

Court ---- How came the Boats to leave you?

ansr. - They cast off themselves I believe from the very heavy fire of the Rebels. Quest. Where did the Boats go to?

ansr. - They were the Boats of the Squadron and the

Preston's came alongside.

Court ---- Was the Schooner fired upon from the time she took the ground till the time you left her?

ansr. - Yes the whole time with Cannon and Small arms.

Court ---- When you hove upon the Windlass did you find her Move at all? Ansr. Not the least.

Court ---- What distance was the Britannia from the Schooner?

ansr. - about a cables length.

Court ---- Was the Diana dry at low Water? ansr. Yes.

Court ---- at what time did you perceive her on fire?

ansr. Between two three o'clock in the morning

This Evidence saying he knew nothing further and Lieut Graves having no questions to ask, the Witness was ordered to withdraw.

Mr. Mathew Murray Pilot called into Court and Sworn.

Court ---- You have heard the admiral's order for the trial of

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Lieutenant Graves for the loss of the Diana Schooner,
read in Court. Ans – Yes.

Court ---- Relate to the Court all the Circumstances You
know of this affair.

Ansr. - We got under sail as quick as possible last Saturday
ten night and when we got the length of Winnisimmet
Ferry they fired at us from the Houses we returned
the fire as quick as possible and proceeded on to
Hog Island where we were fired upon from
that Island, Noddle Island and the Main
we returned those fires and continued engaging
till sunset then carried out a Small anchor to
warp her down again and we got her under weigh
and it being calm the Boats of the Squadron
assisted to tow her down. When we got the length
of Winnisimmet Ferry the Rebels began to fire
again and we returned the fire; The fire from
the shore was so smart upon the boats that
they could not stand it, and they cast off the
Ropes and we let go the Small Bower under
foot to stop her and she touched immediately
on the ferry ways, then we carried out a small
anchor, the Rebels Keeping a constant fire
with a Cannon and small arms; we brought
the Hawser to the Windlass and have with as
many hands as the Windlass would hold and
finding she did not move – The Lieutenant gave
orders for her being shored immediately which was
done. He then ordered me to Sound all round her
which I did and found she was upon The Ways
and acquainted him of it. We kept firing till
the Shores giving way she fell upon her Beam
Ends; when we could no longer fire or stand
upon the deck, The Rebels keeping a constant
fire all the time – The Lieutenant ordered the
Wounded to be carried on board the Britannia
and in about a quarter of an hour after himself
and the rest of us left the Diana and went on
board the Britannia there to defend the Schooner
if possible till daylight – From the Sloop we
kept a constant fire upon the Rebels until we
saw the smoke coming up the companion of
the Diana. The Lieutenant then jumped into the

Boat and ordered some people with him to go onboard the Diana to endeavor to put out the fire, but the fire from the shore was so hot that altho' they got pretty near her they could not get on board and she accordingly burnt till she blew up near three o'clock.

Court ---- At what distance was the Diana from the Britannia? – about a cables length.

Court to } Have you any questions to ask this Evidence
Lieut Graves} Ansr – No

Then this Witness was ordered to withdraw.

Where upon as the Court judged it unnecessary to examine anymore Witnesses all Parties where ordered to withdraw and the Court having very maturely considered the Evidence agreed that Lieutenant Graves in performing the Service he was ordered upon behaved like a very brave and gallant officer, that he did his utmost to annoy the Rebels and after the Schooner was ashore to defend and prevent her from being destroyed and the court therefore acquitted the said Lieutenant Thomas Graves and all the officers and crew of the said Schooner of her loss. The Sentence being drawn up

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agreeable to the said resolutions and Signed by the Court, all persons were again admitted, and the Prisoner being brought in, the Judge Advocate, by the direction of the President, pronounced the same, and the court broke up.

G Gefferina
Judge Advocate

(The National Archives of England. ADM 1/5307 Court Martial Papers (1775-1776) Court Martial of Lieutenant Thomas Graves, in relation to the loss of the HMS Diana held on 6th June 1775.)

11. Philip Stephens to Vice Admiral Samuel Graves August 3, 1775⁴⁷

Philip Stephens to Vice Admiral Samuel Graves August 3, 1775

[Admiralty Office] 3d Augt 1775

Sr

In my Letter of the 25th of last Month by the Folkstone Cutter I acknowledged generally the receipt of your Letters of the 7th 14th 16th 20th 22^d & 26th of June; I now set down to answer in detail such of them as require it, And beginning with the first, in which you give an Account of the *Diana* Schooner being attacked & burnt by the Rebels and inclose the sentence of the Court Martial held for enquiring into the cause of the loss of her; I am to acquaint you that their Lordships are well satisfied with the testimony given by the Court and with what you have related, of the gallant Behaviour of the Lieutenant who commanded her, and of her Company in general But they cannot for reasons that must be obvious to you think of making a precedent of compensating the Officers & Crew of the Kings Ships destroyed by the Enemy for the losses they may sustain on such occasions. The Cases of the *Diana* & *Gaspee* are by no means similar; Nor do I find that the information you have received of a compensation being made to the Crew of the latter is well founded.

(Stephens, Philip. "Philip Stephens to Vice Admiral Samuel Graves 3 August 1775." In Clark, William Bell, editor. 1964. *Naval Documents Of The American Revolution* Vol. 1 Washington, DC: US Navy Department, 1347.)

12. Declaration of Losses Suffered by Henry Howell Williams Battle of Chelsea Creek

A Schedule of House Furniture, Stock Store's, Horses &c &c
that were Destroyed by a Detachment of the American Army;
or Carried off by said Detachment, for the Use of the United States
in the year 1775. belonging to Henry Howell Williams
who then Tenanted Noddles Island in the Harbour of
Boston.

Mansion House

In the Hall

2	Large Mahogany Dining Tables	£6:13:4
1	Tea Table & Compleat Set of Pencil China	5:6:8
1	Tea Table of Blue & White do. & Tea Trea	4:18:8
1	Basket Wine Glasses 3 Dozn. 2 Japan Waiters	1:18:8
1	Mahogany Tea Chest & Case of knives & forks	1:4:--
12	Leather Bottom'd Black Walnut Chairs	13:12:--
1	Coat of Arms work'd on Satting with Silver	10:0:0--

⁴⁷ Vice Admiral Graves requested that the crew of the HMS Diana be reimbursed for their losses. His request was denied.

& Gold thread Mahogy. Gilt Frame.		
24 very Eloquent Gilt Pictures, 1 small Carpet	15:16:0	
		£59:0:8
In the Hall Chamber		
1 Suit Red Harriteen Cornish bed Curtains & Bed Stead	15:11:--	
6 Harriteen Chairs Black Walnut Frames	7:4:--	
1 Easy Chair & Leathr. Bottomd. Round Do	5:4:--	
1 Mahogy. Chest Drawers & Elegant Bureau Table	14:6:8	
1 Stitchd. Toilet hanging & 1 Elegant Sconce Glass	13:11:--	
1 Large Trunk of Gentlemans Cloth's Linen &c left with Mr. Williams for Payment of a Debt	65:11:--	
1 Small Scotch Carpet	2:11:--	121:14:8
Sum Carried Over	£180:15:4	

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	Sum brought Over	£180:15:4
In the Hall Garrett		
8	lb. of Cotton Wool, 2 Beds and Bed-steads	10:18:--
2	Bolsters, 2 Coverlids 2 pr. Sheets & 2 Blankts	3:17:4
40	lb. of flax 2 Barrls Hops & 3 Quntal salt fish	7:1:4
20	yards Duck, 1 Ensigns & Pendant	5:6:--
2	Barrels of Peas & Beans	2:8:--
		29:10:8
In the Entry Closet		
	A Quantity of Mustard, Capers & Cayan	2:8:--
3	Large Jarr's Sweet meats never opened & 1 Large Mugg	3:11:--
3	Large Delph Dishes. 1 do. Bowl 1 Set Castors	11:8:6
		5:16:6
In the Parlour		
1	Painted Carpet 22 feet square quite New	13:6:8

1 Mahogy. Clock cost in England 25 £ Sterl. New	33:6:8	
Mahogany Large Tables, 6 Leather 2 Bottom'd	10:16:8	
Black Walnut Chairs		
1 Work'd Baskt. Large Picture Gilt Frame	4:14:--	
Gentlemans Picture & family peice 1 cover'd	18:11:--	
with Glass & Gilt Frame		
1 pr. of Hand Irons, with Shovel & Tongs	3:12:--	
1 Stand Candlestick with Brass Nobbs	1:11:--	
2 Round about Chairs, & 2 Spy Glasses	4:12:--	
		89:8:--
Sum carried up	£305:10:6	

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Sum brought Up		£305:10:6
Parlour Closet		
13 China dishes 12 Enamall'd China plates	6:16:--	
3 Dozn Blue & White China do. 18 Yellow dishes	3:12:--	
4 Dozn Cream Colourd plates & 1 plate Baskt	1:2:--	
1 Dozn Brown Stone do & 6 button Do.	11:8:4	
4 China Bowls 3 delph do. 6 China buttr. Boats	5:4:--	
12 Stone Dishes 18 Stone plates	1:5:--	
1 Dozn. Tumblers 1 large Sugar pot & cover of Glass	11:46:--	
1 Large 3 pint Tumbler & Cover Beer & Cyder Glass	1:0:0	
1 Compleat Glass Equapage with Mahogy. Stand	11:18:--	
6 Glass Salts 6 Crewills 24 Jelly Glasses	1:6:14	
2 Yellow Tea pots 1 Coffee Do. 6 small Bowls	11:15:--	
1 Turene 6 soap plates 4 Mugs, 24 pully pans	2:8:8	
1 Basket knives & forks 2 Mahogy. Waiters	1:0:--	
2 Large Cordial Bottles & hampter, Large Sugr. Cannistr	11:18:--	
1 Case of Bottles. 6 pint Mugs. 3 Sugar Pots	2:4:--	
2 Punch Ladles Silver Mounted	1:14:--	
1 Silver Nipple & Bottle, 2 Bread Baskets	11:13:4	

32:0:8

In the Counting Room

1	Leather Pouch Sling &c.	11:18:--
4	pr of Sheep Shears 6 new Syths 6 lb Powder	2:10:--
60	bullets 30 lb. Lead. 6 Powdr horns. 2 Powdr flasks	3:10:4
1	Gun 1 Pystal. 6 Bridles. & 8 Leather Halters	5:12:--
2	Sursingles 10 lb. twine 1 winter furr Cap	1:6:8
1	pr. of Money Scales, 1 Case of Razors Box &c	2:2:--
1	Large Journal & Leger not wrote in	1:14:--
2	pr Deer skin Gloves. 1 pr. Silk do	1:12:--
1	pr. Britches, 6 Quires Paper	2:4:--
	a Large Quantity of Garden Seeds, & Books	5:16:--
2	New Riding whips Mounted with Silver	1:4:--
2	Ink Stands. 6 New hoe's 3 Axes	2:5:--
1	Silver Mounted Sword. 12 pr. New Shoes	5:14:--
	Gun Case, Scouring Rod. & Angling Rod	1:11:--
		37:8:--
	Sum Carried Over	£374:19:2

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	Sum brought Over	£374:19:2
	In the Parlour Chamber, & Closet	
1	Large Stair Carpet one Large Do in Chamber	5:2:--
1	Suit of Bed Curtains furniture Cheek & bed Stead	8:11:--
	black Walnut Chest Drawer, & Card Table New	8:16:8
1	Mahogy. Beauro Table 6 Waste back Chairs	7:14:8
1	Large Sconce Glass	5:11:--
		34:13:4
	Parlour, Chamber & Closet Continued	
3	Holland Shirts partly made 1 work back Chair	4:8:--
1	Basket 3 pr Silk Shoes & a Sable Muff	3:17:4
2	Feather do. & Tippets 1 Green Riding Habit	4:18:--
1	Black Satting 1 Do. Tabby 1 Do. Velvet Jackets	3:11:--
1	While Holland Quilt, & Baze Petticoat	1:16:--
1	Barrl. best hard Bread a large Quanty of Loaf Sugar	21:12:--
6	wine Glasses 6 Pudding Dishes 12 Delph plates	1:4:8
10	lb. Honey 3 stone pots 1 Wash Bowl & Bason	11:17:4

25	yds. Broad Cloth. 20 do Chkd Linen & 30 yds	28:11:--
20	lb. Coffee 12 do Chocolate. 3 do. peppr. 2 l Rice	4:10:--
		74:3:4

In the Parlour Garrett

9	Barrels Flour 4 l hard bread a larger Quantity of Pot herbs & Baulm 4 Spinning Wheels & Appendages	26:8:--
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In the Great Entry

1	New Ayl Cloth laver'd all the Entry quite New	10:0:0
1	Blk Walnut Couch & Squab 1 Riding hood	3:0:0
1	Great Coat, 2 Surtouts. 2 fire Buckets & baggs	6:6:8
2	Large Glass Lanthorns. 1 Speakg Trumpet	1:12:--
6	Arm'd Chairs 3 Beaver hats & Cases	6:12:--
		27:10:8

In the Entry Chambers

2	Beds & Bedsteads 2 Bolsters & 4 pillows, & 6 Chairs	14:16:--
1	Toilet Table Covered with Lawn Hangings	1:0:--
1	Large Bible & Several Other Books	1:6:--
		17:2:-

	Sum Carried up	£554:16:6
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	Sum brought Up	£554:16:6
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In the best Kitchen

16	Pewter dishes 5 Dozn. pewtr. plates 1 galln Bason	9:8:--
6	small do. 6 Pewter putting [?] 3 Large Brass Kettles	7:16:--
3	Brass skillets. 1 Coppr. Tea Kittle 1 Do Saucepan	2:8:--
1	Copper Chocolate pot 1 mettle mortr. 1 Coffee Mell	1:11:--
1	Galln. Coffee Pot Copper, Tin Utensills of all Sorts	4:10:--
4	pr. Brass Candlesticks. 2 pr. Iron do. 1 Large Table	3:0:--
1	Blk. Walnut Table. 6 Chairs 1 pr. hand Irons Shovel & Tongs	4:10:--
1	Lookg. Glass. Cloaths & Horse Brushes	1:15:4
1	Oyl Cloth Carpet Box & heaters flat Irons &c	5:13:4
1	Brass Stand & snuffers 2 pr Brass Chafg dishes	1:14:--
		41:14:8

In the Nursery Chamber

1	Bedstead & Curtains Red & White Furniture Check	10: :--
1	small Carpet 6 Chairs 1 Chest Drawrs. 1 Table	5:12:--
1	pr. Dogs shovel & Tongs 2 Large holland Baskets	1:8:--
1	Stand Table 1 pr. of New Shoes	1:0:0
1	Sconce Glass 24 yds. Check. 10 yds. bed Tick	6:3:--
24	yds. Brown Fustian. 12 Do. Woollen Check	2:10:6
1	Cradle, Pillows & Quilt & Linnen yarn for 30 yards of Cloth	3:15:--

30:8:6

In the Garret Over the Nursery

6	Bedsteads 7 feather Beds 9 straw do. & 7 Bolsters	24.2.--
5	pr. of Sheets 6 do blankets & 7 Coverlids	11:2:--
3	pr. of Cards 1 New Seine for Fish	7:4:--
1	Chest of Servants Cloaths 4 Chairs	5:8:--

47:16:-

-

Sum Carried Over £674:15:8

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In the Outer Kitchen

6	Iron pots & Covers, Dish kettle, 1 baking pan	3:3:--
6	Small bowls, 6 Pails 1 wrought Iron Tea kettle	2:4:--
6	puding Dishes 20 Earthen pots 12 Woodn plates	11:15:4
1	Large Table 2 Dozn. knives & forks Chopg. knife &c	1:13:--
1	Elegant Jack & Appurtans. 3 Spits 5 Trams	7:5:4
1	Fender, Dripping pan. Grid Irons &c &c.	1:1:4
1	Copper Ladle. 2 flesh forks, 4 Tin Candlestks	1:5:--
15	Gallon Bottles 1 brass Ladle Screws & hooks &c.	1:5:--
1	Tin Lanthorn 2 frying pans pump hooks	1:16:--
16	Chairs 2 Large Iron Ladles	2:2:--
2	pr. of Bellows 1 pr. Boots 4 large Tubs	4:4:--
1	Large Sugar Jarr. 3 Signum Vita Mortars	5:11:--
1	Brass plate Warmer	2:11:--

33:4:4

Outer Kitchen Chambers

10	Bushels Indian meal 4 Do. Rye & 10 Bags	3:16:--
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1	Large Meal Chest 1 Ladys Saddle & Bridle & Pillion	5:8:--	
	A Quantity of New & Old Rigging, 1 large Sail	6:10:--	
1	Large hay knife 12 Sythes & Tackling	4:18:--	
1	Set of holsters & housing for Trooper Compleat	4:11:--	
8	Stone Pickle Jarrs	2:8:--	
			30:0: 0

Sundry things in pantry such as Candles
try'd Tallow
Warming pan folding board, Salt, 6 brass
Cocks 14:3:8
Worsted yarn 1/2 box Glass &c. &c.
Amountg. to
Sum Carried up £752:3:8

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	Sum brought up	£752:3:8	
	House Linnen		
6	Large Damask Table Cloths. 1 Draper Do.	9:1:4	
6	Damask Napkins. 21 Diaper Towell	3.2.8	
6	Diaper Rowlers. 6 pr. fine Sheets	10:8.--	
4	pair Coarse Sheets. 11 pr. of Pillow Cases	5.6.8	
3	Diaper Cloths 2 Oyl Cloths 1 Baize Do.	1:6.--	
1	Blue & White Calico Quilt. 3 Coverlids	2:8:--	
			31:12:8

	Mens Wearing Apperral		
2	pr. white tick Bretches. 2 pr. Worsted do.	2.6.--	
1	pr. Broad Cloth Do. 1 pr Velvet & 1 Leather do.	6.6.--	
3	Cloath Jackets. 1 Linnen Do.	3:12:8	
2	Broad Cloath Coats. 1 Fustian Ditto	9:13:--	
29	pr. Worsted Stockings	6:12:--	
3	pr Silk and 6 pair Thread Ditto	4:4:--	
14	Holland Shirts. 48 New Chekd. do. 6 pr. Trawsers	18:17: 4	
6	Frocks 1 Indian belt & Bullet pouche	4:8:--	
1	Scartet & 7 Neck Stocks	3:11:--	

58.19.--

Weomens Apperrall		
3	Calico Gowns 2 patch do.	9.4.--
2	Russell 1 Calico Morning Ditto	3.6.--
5	Muslin & Lawn Aprons. 3 Muslin Handkerfs	3:14:--
5	pair of Silk Gloves	1:14:--
1	Muslin Handkerf. work & with Gold thread	1:8:--
1	pair Stockings silk workd Clock Gold thread	1:6:--
4	Petticoats 2 Short Gowns	4:11:--
3	pair of stays 9 Checked Aprons 12 Handkerfs	4:10:--
7	pr. of thread & cotton hose. 4 Cambk. Aprons	3:1:4
		32.3.
		4
	Sum Carried Over	£874:18:8

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	Sum brought Over	£874:18:8
	Weomens Apperral continued	
2	pr Silk stockgs 1 Ivory fan, a piece New Chintz	2.12.8
5	Silk Handkerchfs 1 pr. Tabby Cloggs & 1 pr of Golashoes	2:8.8
4	Shifts, a Number of Dress Caps & Night Ditto	2:12:--
1	Green Tabby Pockt. Book Silver Tag 1 piece Lace	1:5:--
1	Stone Necklace & Ear-Rings	1:17:4
	Linnen & Cloathing for 6 Children from 2 years Old to 10 years Old. & Babby Linnen &c &c	45:11:--
1	Silver Corral & Bell	3:8:--
		59.3.8
	In the Corn Barn	
422	Bushls of Indian & Rye @ 4/-	84:8:--
	1240 lb. wt. of Sheeps Wool	93:11:--
	The Corn House Cost me	12:11:--
	A Large New-Main Sail for Sloop	15:11:--
		204:8:--

In the Cellars

3	Barrls. Sope. 5 Barrls of Beef prime peices	15:15:--	
1	Barrls Pork all Midlings @72/-	39.12.--	
1	Barrl Tongues 40 lb. Butter 50 lb. Hoggs 1 at	3:10:8	
2	Butts of Vinegar holding 6 Barrels	7:4:--	
3	Barrls. Cyder 36/2 Q. Casks Wine 220 1 Dozn. Ditto Bottled	1412.--	
1	Hamper Dorchester Ale. 6 Dozn. Excellent Cyder	3.16.--	
3	Dozn. Carrl. Wine 1 keg Methegalín Sweet Oyle &c.	6:4:--	
20	Dozn. Bottles 8% 1 Cask 24 Nails 133/4-	10:13:4	
1	Barrl. Try'd 1 all 100 lb. Spokes	5.3:4	
2	Hogsheads Old Jamaica Spirit 231 Gallns @ 5/-	57.15.--	
3	Hogsheads New Rum Just got home from the W. Indies Quanty. 234 Gallons a 3/4-	39:0:0	
50	Bushls Potatoes. 60 Emty Bulls & Barrels	15:0:0	
			218:5.
			4
	Sum Carried Up	£1356:15:8	

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	Sum brought Up	£1356:15:8	
	Cellars Continued		
500	wt fine Bacon 100 wt. Smoak & Beef & Mutton	19.2.8	
1	hhd. Molasses 108 Gals Nullage hhd. 15 galls	9.4.6	
150	wt. fine Old Cheese, Cheese press Motes &c.	5.4.--	
			33.11.2

In the Tool House & out Door Articles

5	Large Iron Crows a New sell Cart Pier	7.10.--
4	Ox chains 48/- 1 pr. horse traces 12/ 13 Spades	6.12.--
6	Clugors 24/ 1 long Saw 18/- 2 hand Do 12/ 2 Drawg knives	3.9.--
8	Shovels 32/- 7 Yokes & Bows	5.7.--
	Beetle & wedges. broad & Narrow Axes	2:8.--
1	Large Sledge Hammer 4 small do Gimlets &c.	2.2.--
6	Chissells 3 dung forks. Squares &c.	2.4.--
2	Good Plows and Irons	3:0:--
2	Boat Anchors 1 plow Share 2 wt Iron	4.15.4
2	pr. Cart Wheels 4 Carts	20:11:--

3000	feet boards 100 Seder posts for Board fence	17.4.8	
2	Sleads. Quantity Seder Rails 900	11.8.--	
	Deck Sloop Load of [Tainging?] timber & Spruce poles	14.17.4	
			109:15:4
1	large Boat £32~1 Moses do £14. 1 yall £10-	56~ ---	
2	Canoe's & 24 Boat Oars	8.16.--	
	Boat House & Poultry House	12~ ---	
	A New Hog Sty 2 Wheelbarrows	5.14.--	
2	pr. Large Stilyards. 4 pr. hay screws fixd	26.12.--	
	A New Black-Smiths Shop Cost Mr. Williams	10.--	
53	Tons hay burnt in the Barns...@3£	159:11:--	
20	Do. hay in Stacks burnt...@ Do	60:11:--	
	Watering Troughs Hay forks &c.	2:19:--	
			341:1:0
	Sum Carried Over	£1841.3:2	

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	Sum Brought Over	£1841:3:2	
	The live Stock Missing		
43	Elegant Horses...@ 30£ Each put into the Publick Stables	£1290:11:--	
3	Cattle taken & used as Provisions for the Army	30:11:--	
220	Sheep used as Provisions as above @12/-	132:11:--	
4	fine Swine	12:11:--	
5	Dozn Fowls Turkys & Ducks	6:11:--	
			1470:0:0
	Fencing & Wood		
30	Cord of Wood...@ 24/-	36:11:--	
3000	Rails Amountg to 45 Cord Wood @ do	54:11:--	
50	Rods of Board fence & post for the Same	40:11:--	
	Young Locust tree's Cut down which were Set out by Mr. Williams & were to have been paid	191:19:--	
333	for by the Owners of the Island at 3/ Each	49:19:--	
2	Large Anchors No 1 weighing 31 l:2 q:14 lb... No. 2 weighg. 25 l : 0: 18 lb taken by the	142:4:--	

American
Troops @ 16d

£3645:6:2

I Henry Howell Williams do testify declare & say that the above and forgoing schedule contains a just & true Inventory of the Various Articles which I lost on Noddles Island between the 29th of May & 2d Day of June 1775 In Consequence of the landing of a Detachment of the American Army; That the said Inventory (A Very few Articles excepted) was taken in the month of July following & that according to my best Judgment and Recollection the Same is just and true
Henry Howell Williams

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I Elizabeth Williams wife to the foregoing Deponent do testify and declare that the forgoing Inventory contains a true list of the Various Articles of House furniture Cloathing & Stores within the Mansion House which we lost between 29th. May & 2d Day June 1775 According to my best Recollection & Judgment made Soon after the Loss happened and Since confirmed Upon mature and Repeated Deliberation
Elizabeth Williams
Commonwealth of Massachusetts
Suffolk Is. Boston 10th March 1787
Then personally appeared
Henry Howell Williams &
Elizabeth Williams his Wife, & being duly cautioned
made Solemn Oath to the Truth of the respective Declarations above by them severally made & Subscribed
Before Wm. Tudor Judge Adv.

(Noddles Island Papers, 1775-1814. Catalog# Ms. S-678. Massachusetts Historical Society, Boston, Massachusetts.)

13. Henry Howell Williams Repaid

Commonwealth of Massachusetts

In Senate, June 23, 1789.

Resolved that the Treasurer of this Commonwealth be and he hereby is directed to issue his note in behalf of the Commonwealth in favor of Henry Howell Williams, for the sum of two thousand pounds and interest thereon from the date of the same in full compensation of the damage he sustained from having his stock and other property taken from him or destroyed in consequence of orders given by the commanding officer of the Massachusetts troops in the month of May, 1775, and that the same be charged to the United States.

(“Henry Howell Williams Repaid.” In Sumner, William H. 1858. *A History of East Boston; With Biographical Sketches of Its Early Proprietors, And an Appendix*. Boston: J. E. Tilton And Company, 386.)

14. William Gordon’s Account

May 27th About six hundred of the Massachusetts and New Hampshire forces were employed to bring off the flock from Hog Island and Noddles Island, which lie contiguous: the intervening passage is fordable at certain times of the tide. A party went on and fired the hay and barn on Noddles Island, on which a number of marines crossed from Boston; and, upon the provincials retreating to Hog Island, were decoyed down to the water side, when a hot action commenced, which did not close with the day. The king’s troops amounted to some hundreds, and were supported by an armed schooner of four six pounders and twelve swivels, an armed sloop, and the barges all fixed with swivels. The provincials were commanded by general Putnam. Dr. Warren’s zeal and courage would not admit of his remaining at a distance: upon hearing what was going forward, he repaired to the spot to encourage the men. They had two pieces of artillery, which were well served, and did considerable execution. The night was very dark, but the action continued all through it. Toward morning the schooner got aground upon Winnisimmet ferry ways; the British were obliged to abandon her, and the provincials boarded, and after stripping her of every thing valuable, set her on fire. They loft not a man, and had only three wounded, not one mortally. The regulars were said to have suffered very much, not to have had less than two hundred killed and wounded. The loss was, probably, greatly exaggerated: that, however, had a good effect on the provincials. The affair was matter of no small triumph to them, and they felt, upon the occasion, more courageous than ever.

The provincials went afresh on Noddles Island, and burnt the mansion house, which answered no good purpose whatever. But there are too many, who destroy property merely because of its having belonged, or being supposed to belong to those Americans, who have taken the opposite side of the question in the present controversy. The stock, consisting of between five and six hundred sheep and lambs, twenty head of cattle, besides horses, was taken off by them in the course of the day. The next day five hundred sheep and thirty head of cattle were removed off Pettick’s Island by a party under colonel Robinson. On the night

of June the second, eight hundred sheep and lambs, together with a number of cattle, were carried off Deer Island by a corps of provincials under major Greaton.

(Gordon, William. 1794. *The History of the Rise, Progress, and Establishment of the Independence of the United States of America: Including an Account of the Late War and of the Thirteen Colonies, from their Origin to that Period*. Vol. 2. New York: Samuel Campbell, 45-46.)

15. Richard Frothingham's Account

The next skirmish was dwelt upon with great exultation throughout the colonies. The committee of safety had directed the live stock to be driven from the islands. On Saturday, May 27, a detachment was ordered to drive it from Hog and Noddle's Islands, lying near Chelsea, the passage to which, at low tide, was covered by about three feet of water. About eleven A. M. a party went from Chelsea to Hog Island, and thence to Noddle's Island, to drive off the stock. They were observed by the British, who, to prevent this, despatched a schooner, a sloop, and forty marines. The party, however, burnt a barn full of salt hay, an old farm-house, killed three cows and fifteen horses, and sent a few horses and cows to Hog Island. At this time they were fired on from the vessels, and by a large party of marines, who put off in boats from the men-of-war; and they retreated to a ditch, lay there in ambush, until they obtained a chance to fire on the marines, when they killed two and wounded two. They then retreated to Hog Island, and were joined by the remainder of the detachment. The stock was first driven off, -- between three and four hundred sheep and lambs, cows, horses, &c., -- and then the Americans formed on Chelsea neck, during which, the British fired from the vessels, from the barges fixed with swivels, and from Noddle's Island. The Americans sent for a reinforcement. About three hundred men and two pieces of cannon arrived about nine o'clock. General Putnam hailed the schooner, offering the men good quarters if they would submit, who answered this summons with two cannon shot. This was immediately returned by the Americans, and a sharp fire on both sides continued until eleven o'clock, when the fire of the schooner ceased. The men had abandoned her, and towards morning she got aground upon the ferry ways. A party consisting of Isaac Baldwin and twelve men, about day-break, after taking out her guns and sails, and other articles, burnt her, under a fire from the sloop. In the morning --Sunday--the firing on both sides was renewed, -- by the British from Noddle's Island Hill, and the sloop. The sloop was so much disabled that she was obliged to be towed off by the boats. After a few shots had been exchanged between the party at Chelsea and the marines on Noddle's Island, the firing ceased. The Americans did not lose a man, and had only four wounded. The loss of the enemy was reported at twenty killed and fifty wounded. This was probably exaggerated. The Americans captured, besides clothes and money, twelve swivels, and four four-pound cannon. This affair was magnified into a battle, and the gallantry of the men engaged in it, and the bravery of General Putnam, elicited general praise. The news of it, arriving in congress just as it was choosing general officers, influenced the vote of Putnam for major-general, which was unanimous.

On the 30th of May, a party of Americans went to Noddle's Island again, burnt the mansion-house of Mr. Williams, and drove off the stock, consisting of between five and six

hundred sheep and lambs, twenty head of cattle and horses. On the 31st, at night, a party under Colonel Robinson removed about five hundred sheep and thirty head of cattle from Pettick's Island. On the night of June 2, Major Greaton took from Deer Island about eight hundred sheep and lambs, and a number of cattle. He captured, also a barge belonging to one of the men-of-war, with four or five prisoners.

(Frothingham, Richard. 1849. *History Of The Siege Of Boston, And Of The Battles Of Lexington, Concord, And Bunker Hill. Also, An Account Of The Bunker Hill Monument. With Illustrative Documents.* Reprint 1873. Boston: Little, Brown, and Company, 109-110.)

16. General William Sumner's Account of the Battle from *The History of East Boston*

Saturday, the 27th of May, 1775, a small party of the American Army at Cambridge received orders from General Ward to drive stock from Hog and Noddle's Islands. Advantage was to be taken of the ebb tide, when the water would be fordable from Chelsea (Revere) to Hog Island, and from Hog Island to Noddle's Island, it there being about knee-high. This detachment composed of Massachusetts and New Hampshire men numbering from two to three hundred, by some accounts, and six hundred by another, was led by Col. John Stark of New Hampshire, afterwards of Bennington fame.

Forty marines from the British fleet had been previously stationed on Noddle's Island as a garrison, and for the protection of the live-stock...

Col. Stark, with his detachment, first crossed from Chelsea (Revere) to Hog Island, and took from it four hundred sheep, represented, erroneously, we think, as stolen by General Gage and deposited there for safe-keeping. They then passed over to Noddle's Island, to rescue the cattle there from their British keepers. The party had killed a few horses and 'divers horned cattle,' and taken away alive a few more, when a signal gun was fired from an armed schooner, lying at anchor near a signal gun was fired from an armed schooner, lying at anchor near Winnisimmet ferry ways. The British admiral hoisted a red flag at main-masthead, and sent the schooner, which mounted four six-pounders and twelve swivels, an armed sloop, and a large number of marines from different men-of-war, up Chelsea Creek (river), to cut off our return to the main land. The barges conveying these marines were eleven in number, and all were mounted with swivels.

A heavy fire was now opened from the sloop and schooner, under cover of which the marines advanced upon our men, who were busily engaged upon the Island, in the prosecution of their object. In the meantime, General Gage sent over from the city, four hundred regulars to reinforce the marines previously stationed on (Noddle's) Island. The provincials, under this heavy fire, retreating to a ditch in the marsh, kept themselves undiscovered, until they had opportunity to fire with effect upon the enemy; thus early adopting a practice, for which they were so celebrated during the war, or reserving their fire until sure of their aim, and which, in this instance, resulted in killing some and wounding other of the unsuspecting regulars. They then recrossed to Hog Island, where they were

joined by the remainder of the party from Chelsea (Revere), the regulars, who remained upon Noddle's Island firing upon them at the same time very briskly by platoons.

Having cleared Hog Island of all the stock, and a sharp fire still continuing between them and the schooner, sloop, boats, and marines, the provincials drew up on Chelsea (Revere) Neck, and sent for reinforcement. General Putnam with three hundred men and two four-pounders, came to their aid, and, being the highest in rank, he took command of our united forces, which now amounted to about a thousand men. The gallant and patriotic Warren, also, too ardent to remain at a distance, hastened to the spot as a volunteer, and by words and deeds encouraged the men. Putnam reached the ground about nine o'clock in the evening, and took in at a glance the true state of things. Perceiving Noddle's Island occupied by a large body of the enemy, and that a galling fire was kept up by the schooner, sloop, and boats, he was his customary coolness went down to the shore and hailed the schooner, which was within speaking distance, offering the men good quarter, if they would surrender. The schooner answered with two cannon shot, which was immediately replied to by two discharges from the cannon of the principals. A heavy fire ensued from both sides. The armed sloop, and a great number of boats sent from the ships, came to the aid of the schooner, and at the same time a large reinforcement of marines, with two twelve-pounders, was sent to Noddle's Island. For two hours the engagement was severe, until the firing from the schooner ceased. The fire from the shore was so hot that her men found they must perish on board their vessel, or make their escape from it. The love of life conquered, and they hastily took to their boats, leaving the schooner, and all she contained, as booty for the provincials. The barges attempted to tow her back to her station through the sharp fire of Putnam's men; but, unable to endure the severe fire, they were compelled to quit her. The Battle now becoming more general, continued through the whole night; and during the action, a large barn, full of hay, and an old farm-house, on the Island, were burned.

The schooner drove ashore on the Winnissimet ferry-ways, (then westerly of Chelsea Bridge) and a party, consisting of Isaac Baldwin and twelve others, of the provincials, after taking from her whatever was valuable, rolled bundles of hay under stern, and set her on fire and burned her up. The reason for burning the schooner, of course, was the fact, that, the harbor being in the possession of the British, they would not be able to keep the vessel in their own hands.

The provincials took from the schooner "4 double fortified four-pounders, 12 swivels, chief of her rigging and sails, many clothes, some money, &c., which the sailors and marines left behind." The account honestly adds, "they having quitted in great haste!" Doubtless they did. The committee of safety took possession of the contents of the schooner, as appears from the following extract from the journal of that committee: "May 30, 1775. Elisha Lettinwell was directed to proceed with two teams to Chelsea, and bring up from thence the cannon and other stores saved from the schooner which has been burned by our people, and to lodge said stores in this town (Cambridge)." And again, on a later date (June 21), we find in the same journal, "*Ordered*, That Mr. James Munroe, an armorer in the provincial service, take into his keeping a quantity of old iron, saved out of the cutter burned at Winnesimit ferry, he to be accountable to the committee for the same.

The sloop still continued her fire, which was vigorously replied to from the shore, and a heavy cannonade was commenced upon the provincials with the twelve-pounders from a hill upon Noddle's Island, called West Head, near to, and directly opposite, the Winnisimmet ferry-ways. But Putnam, inspired with the same dauntless courage with which he entered the den of the wolf, heading his men, and wading up to his middle in mud and water, poured so hot a fire upon the sloop. that. very much crippled this sloop with small arms; that, leaving their cannon, they waded within musket distance, and there fought the heavy armed vessel heedless of the great disparity in weapons and of their dangerous position. Putnam's spirit animated the provincials, and, foremost in the fight himself, he was nobly sustained by his brave followers...

Soon after the disabling of the sloop, the firing ceased, excepting a few scattering shots between the marines on Noddle's Island, and the party at Chelsea. During the whole of the following forenoon, however, the Somerset man-of-war, of sixty-eight guns and 520 men, was continually firing upon the people on the Chelsea side, who had gathered together in great numbers to see what had occurred upon the people on the Chelsea side, who had gathered together in great numbers to see what had occurred upon the Island. It is remarkable, that in this long and well-contested engagement, not a man belonging to the provincial army was killed, and but three or four were wounded, and one of these by the bursting of his own gun; while the loss of the enemy in killed and wounded was very severe. In reference to this battle, a living writer observes: "On the 13th of May, all troops at Cambridge marched, under the command of Putnam, to Charlestown, and defied the enemy under the very muzzles," and on the 27th of May, "the very important action was fought, and victory achieved, under the command of Putnam."

(Sumner, William H. 1858. *A History of East Boston; With Biographical Sketches Of Its Early Proprietors, And An Appendix*. Boston: J. E. Tilton and Company, 371-375.)

17. Mellen Chamberlain's Account

...I have sought traditions, but have found only two. One of these is that of Elizabeth Hasey, to be given later; and the other, that of the late Isaac Pratt, a man of intelligence and good memory; but like most very aged people, who have a story to tell, he told his well, though cross-examination disconcerted him, and no valuable results followed. His narrative, so far as it relates to the matter in hand, I give in his own words:

"After the battle of Lexington a good many sheep and cattle were sent to Chelsea by Gen. Putnam. [There is no evidence of this, nor is it probable.] The companies there were quartered, in part, in the Carter House, and in part in the Cary House. [I think this was not before the winter of 1775-6.]

"Gen. Putnam directed the troops to go to East Boston, May 27th, and steal all the cattle there. They went by night, and crossed Chelsea Creek, at the Salt Factory, where Magee's foundry now stands; hard beach there; a man there to hoist a light when they should come back. [There may have been a small affair of this kind, but it was not the principal affair.]

Cattle driven to Powderhorn Hill, where the trees are. [Since cut down, but then and recently a little southeasterly of the Soldiers' Home.] Had orders to burn the houses on Noddle's Island.

“British schooner had eight cannon, with swivels on a sloop and barges. They sailed up Chelsea Creek, near to the Rubber Works. Fought all night. Schooner could n' get back. Our folks went to the marsh. British tried to tow her with the barges; we tried to kill the barge-men. Sam. Batchelder lives where Sam. Pratt fought. [Near the foot of Pearl street.] Ben Brintnall fired sixty times on the men in the barges, which had to come close to the Salt Works. Gen. Putnam sent down two cannon, and Dearborn, of New Hampshire, came over with them. The Lion ran quartering on the Ferry Ways, turned over a little, and still fired her shot which came up to Mt. Washington, and were found between the Cheever and Hawes houses. I have one, and a piece of one of the masts of the schooner, split into rails. [Which he exhibited on patriotic occasions.] Sam Pratt carried down hay with which to burn her. Shot came from East Boston. Only three or four houses in Prattville at that time.”

...I now give what I believe to have been a true outline of the affair, omitting some things already told. In its investigation for some time I was perplexed with two difficulties: whether Colonel Stark crossed from the Chelsea shore to East Boston, or from the Revere shore to Hog Island, as the accounts varyingly state. After a personal examination of the creeks and bordering marshes, ---once made with danger of engulfment, ---I found no point between the westerly East Boston bridge and the Revere Beach Railroad, where the creeks were fordable at low water, or the marshes passable in the driest season. Where then did Colonel Stark cross either to Hog or Noddle's Island? This was the first difficulty. The second was to find “Chelsea Neck,” where the provincials drew up on their retreat and sent for reinforcements. I found no one in Revere who ever heard of “Chelsea Neck.” Nevertheless the name is old, for, in 1632, the General Court ordered, “that the necks of land betwixte Powder Horne Hill and Pullen Poynte shall belonge to Boston.” And from an elevation to which William T. Hall, Esq., of Revere, kindly led me, the whole region was visible, and we easily traced the ridge of upland lying between the north and south marshes, from the westerly foot of Powder Horn Hill, by the way of Washington Avenue, Fenno, and Beach streets, down to the sea, and thence over the beach to Pulling Point. This upland is the “necke of land” of 1632, and over it, in 1699, Boston directed a committee, of which Deane Winthrop was chairman, to mark the course of a road, then old, and now substantially the Beach street road to Winthrop. It was somewhere on this “Chelsea Neck,” that Colonel Stark, when hard pressed by the British, “drew up,” and sent for reinforcements. At that time, the greater part of the people of old Chelsea lived at what is now Revere, and there were the chief interests to be protected, and there was the guard which John Pratt entertained.

With these explanations, a tolerably clear account of the affair is possible.

At the time when General Ward at Cambridge, on the morning of May 27, 1775, sent a body of troops to remove the live stock from Hog and Noddle's islands, the only practicable route was from Medford, turning the Malden marshes, by following the foot of the uplands to Revere, near the meeting-house, where Stark's party was probably joined by the Chelsea company, under Captain Samuel Sprague. These forces then followed the old road, now

Beach street, down to the Sale farm, from which the Creek was fordable at low water, to the easterly end of Hog Island.

Having sent to the main land the sheep and cattle collected on that island, they crossed to Noddle's Island, where they gathered stock and destroyed property which might be serviceable to the British. But before they had completed their work, the British appeared in force, and after some skirmishing, the provincials retreated by the road they came, to "Chelsea Neck," and there waited for a reinforcement. Meantime, probably late in the afternoon, the British had sent a schooner with a sloop and several barges up Chelsea Creek, to cut off Stark's retreat. At 9 o'clock, P. M., it is said, General Putnam with 200 men and two four pounders, and accompanied by Dr. Joseph Warren, appeared on the scene. With his artillery drawn up in front of the Newgate, or Yeaman house, he arrested the advance of the schooner and made her retreat impracticable from the point she had reached, ---a little above the Rubber Factory. That the principal fight with the schooner was at this point, was the testimony of Elizabeth Hasey, and eye-witness, repeatedly given to William T. Hall; and this was confirmed by the fact that he had often dug up small cannon balls in front of Newgate house.

From that point Chelsea Creek in front, and the deep marsh southerly, would have prevented further attack on the schooner, until she had drifted down to near the foot of Highland street, where from the bluff on the northerly side of Marginal street she would again come under the fire of the provincials; and probably here Benj. Brintnall fired the shots, as told by Isaac Pratt.

(Chamberlain, Mellen. 1908. *A Documentary History of Chelsea Including the Boston Precincts of Winnisimmet, Rumney Marsh, and Pullen point 1624-1824*. Vol. 2. Boston: Massachusetts Historical Society, 432-452.)

APPENDIX B: GIS METADATA

Battle of Chelsea Creek GIS		Metadata		Compiled by Chris Maio, Project GIS Consultant
Name	Data Type	Feature Class Type	Description	
BASEMAP_KOCSA	Personal Geodatabase		This Geodatabase houses all Base Map and KOCSA related data.	
Archeological Potential	Feature Dataset	Dataset	Feature dataset associated with mapping the archeological potential of sites associated with the Battle of Chelsea Creek.	
Anno_ArchPotential_Findings	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.	
Anno_BattleEvents	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.	
ArcheologicalPotential_BattleEvents	Feature Class	Point	Locations of main battle events associated with the Battle of Chelsea Creek.	
ArcheologicalPotential_BattleEvents_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.	
BattleEvent_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.	
ArcheologicalPotential_Findings	Feature Class	Point	Location of anecdotal archeological findings associated with the Battle of Chelsea Creek	
ArcheologicalPotential_Findings_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.	
ArchPotential_Findings_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.	
Current_Shoreline_1	Feature Class	Polyline	2005 shoreline derived from the MassGIS Towns layer used for comparison with historical shoreline.	
Current_Shoreline_Poly	Feature Class	Polygon	2005 shoreline derived from the MassGIS Towns layer used for comparison with historical shoreline.	
Towns_Current_	Feature Class	Polygon	This polygon layer consists of all towns in Massachusetts and was provided as the MassGIS Towns layer.	
Towns_Current_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.	
Basemap	Feature Dataset	Dataset	This Feature Dataset consists of all layers which make up the historical base map.	
Anno_Roads	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.	

Anno_Saltmarshes	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_Upland	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_Waterbodies	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_Wharfs	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Buildings	Feature Class	Polygon	This layer consists of the major historical buildings within the areas associated with the Battle of Chelsea Creek.
Buildings_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Buildings_Source	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
Contours_3m	Feature Class	Polyline	These contours were produced utilizing the 2002 LIDAR derived DEM of the upland areas of the study site. It was determined that these areas had experienced only small modifications during the period between 1775 and 2002.
CurrentShoreline	Feature Class	Polyline	This data represents the 2005 shoreline of Boston Harbor and is derived from the MassGIS Towns layer.
LowWater	Feature Class	Polygon	This data represents the low water areas shown on the 1847 Coast Survey maps and the H-850-1861 (In area of Winnisimmet).
LowWater_Source	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
NavigableWater	Feature Class	Polygon	This data represents the navigable waters shown on the 1847 Coast Survey maps.
Navigable Water_Line	Feature Class	Polyline	This data was created by converting the navigable water polygon into a polyline and represents the threshold between low water and navigable water.
Navigable Water_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
Roads	Feature Class	Polygon	This data represents the major roads of the area associated with the Battle of Chelsea Creek. They were digitized from the 1847 Coast Survey maps as well as other historical cartographic and bibliographic sources. These data do not accurately represent all roads in existence in 1775. It also may include some roads that were developed after 1775. The accuracy of these data can be clearly seen when overlaying the data over a current orthophotograph.
Roads_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Roads_Line	Feature Class	Polyline	This data was created by converting the roads polygon file to a polyline file. It represents the major roads of the area associated with the Battle of Chelsea Creek. They were digitized from the 1847 Coast Survey maps as well as other historical cartographic and bibliographic sources. These data do not accurately represent all roads in existence in 1775. It also may include some roads that were developed after 1775. The accuracy of these data can be clearly seen when overlaying the data over a current orthophotograph.

Roads_Source	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
Saltmarshes	Feature Class	Polygon	This data represents all of the saltmarsh and wetland areas within the study site and was derived from the 1847 Coast Survey Map.
Saltmarshes_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Saltmarshes_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
Shorelines	Feature Class	Polyline	This data represents the 1775 shoreline and was derived from the 1847 Coast Survey maps as the primary source and the 1817 Coast Survey maps as the secondary source. Other historical maps were also used in the areas of Boston and Charlestown. This data was the foundation for the entire dataset and is the primary feature in the Chelsea Creek dataset.
Study Site	Feature Class	Polyline	This data represents the area included for the geospatial analysis of the Battle of Chelsea Creek. It was necessary to create this spatial limitation as including surrounding areas was well beyond the scope of this project.
Study Site	Feature Class	Polygon	This data represents the area included for the geospatial analysis of the Battle of Chelsea Creek. It was necessary to create this spatial limitation as including surrounding areas was well beyond the scope of this project.
Trees	Feature Class	Point	This data represents major areas of vegetation and tree cover during 1775. The data was subjectively created based on several historical maps and should not be considered a definitive representation of all trees in existence during 1775.
Trees_Source	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
Upland	Feature Class	Polygon	This data represents the terrestrial areas of the study site which do not include saltmarshes and wetlands. It was primarily derived from the 1847 Coast Survey maps.
Upland_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Upland_Source	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
Waterbodies	Feature Class	Polygon	This data represents all major hydrographic features within the study site and includes both navigable and low waters.
Waterbodies_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Waterbodies_Source	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
Waterline	Feature Class	Polyline	This data represents linear hydrographic features within the study site including small rivers and tidal creeks.
Wharfs	Feature Class	Polygon	This data represents the wharf in existence in 1775 and were derived from Coast Survey maps. This data likely includes wharfs not in existence in 1775 especially in the areas of Boston and Charlestown. This data should not be considered a definitive source of 1775 wharf as many of the maps during that time period did not accurately portray these features.
Wharfs_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.

Wharfs_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
KOCHOA	Feature Dataset	Dataset	This feature dataset contains all KOCHOA data.
AdvanceBritish	Feature Class	Polyline	This data represents the routes of approach for British land and sea forces during the Battle of Chelsea Creek. They were derived from historical accounts.
AdvanceProvincial	Feature Class	Polyline	This data represents the routes of approach for American Provincial forces during the Battle of Chelsea Creek. They were derived from historical accounts.
Anno_Battle_Events	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_BattleEventPoint	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_BritishShips	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_CoverConcealment	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_DefiningFeatures	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_FieldofFire_BritishSmArms	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_FieldofFire_NavalForces	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_FieldofFireBritishCannon	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_FieldofFireProvincialSmArms	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_HistoricLocations	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_KeyTerrainBritish	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_KeyTerrainProvincial	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_ObservationBritishAll	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_ObservationBritishHMSPreston	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_ObservationProvincialBelling	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_ObservationProvincialMill	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.

Anno_ObservationProvincialAll	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_Obstacles	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_Summits	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
BattleEvents	Feature Class	Point	This data represents the general locations of the major battle events and were derived from historical accounts.
BattleEvents_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
BattleEvents_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
BritishShips	Feature Class	Point	This data represents the general locations of British Naval forces taking part in the Battle of Chelsea Creek.
BritishShips_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
CoverandConcealment	Feature Class	Polygon	This data represents areas that provided cover or concealment to both British and Provincial forces during the Battle of Chelsea Creek.
CoverandConcealment_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
CoverandConcealment_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
DefiningFeatures	Feature Class	Point	This data represents the approximate locations of the defining features of the Battle of Chelsea Creek. Each component of the KOCOA analysis illustrates features of the battlefield. Critical defining features are those that were significant to the outcome of the battle.
DefiningFeatures_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
DefiningFeatures_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
Diana_possibleRoute	Feature Class	Polyline	This data represents one of the possible routes used by the HMS Diana at the headwaters of Chelsea Creek. The data was derived by historical sources and bathymetric analysis.
FieldofFire_BritishSmallArms	Feature Class	Point	This data represents the approximate firing positions of British forces and were derived from historical sources.
FieldofFire_BritishSmallArms_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
FieldofFire_BritishSmallArms_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
FieldofFire_BritishCannon_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
FieldofFire_CannonRange_	Feature Class	Polyline	This data represents the approximate range of Provincial and British Cannon range (1000 m). The data was derived from historical sources.

FieldofFire_LongBoats	Feature Class	Point	This data represents the location of British firing positions from their longboats. The data was derived from historical sources.
FieldofFire_NavalForces	Feature Class	Point	This data represents the location of British firing positions from their ships. The data was derived from historical sources.
FieldofFire_ProvincialSmallArms	Feature Class	Point	This data represents the approximate locations of Provincial firing positions. It was derived from historical sources.
FieldofFire_ProvincialSmallArms_Anno	Feature Class		This Annotation Class annotates the identified Feature Class.
FieldofFire_ProvincialSmallArms_Sources	Annotation Class		This Annotation Class annotates the identified Feature Class.
FieldofFire_SmallArmsRange	Feature Class	Polyline	This data represents the range of small arms fire (80-100 m).
FieldofFireBritishCannon	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
FieldofFireBritishCannon_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
FieldofFire_BritishCannon	Feature Class	Point	This data represents the approximate location of the British cannon position on Noddles Island Hill.
FieldofFire_ProvincialCannon	Feature Class	Point	This data represents the approximate location of the Provincial cannon positions and is derived from historical sources.
FieldofFireProvincialCannon_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
FieldofFireProvincialCannon_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
HistoricLocations	Feature Class	Point	This data represents the approximate location of historical events pertaining to the Battle of Chelsea Creek. It was derived from historical sources.
HistoricLocations_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
HistoricLocations_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
HMSDiana	Feature Class	Point	This data represents one of the positions of the HMS Diana and was derived from historical sources.
HMSDiana_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
KeyTerrainBritish	Feature Class	Polygon	Noddles Island Hill provided key terrain for British forces. This location provided observation points and firing positions that commanded important sections of the battlefield. The data was derived from historical sources and topographical analysis.
KeyTerrainBritish_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
KeyTerrainBritish_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
KeyTerrainProvincial	Feature Class	Polygon	Mount Bellingham and Mill Hill provided key terrain for provincial forces. These points provided observation points and firing positions that commanded important sections of the

			battlefield. The data was derived from historical sources and topographical analysis.
KeyTerrainProvincial_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
ObservationBritish_All	Feature Class	Point	This data represents the observation locations for British forces and was derived from historical sources and topographical analysis.
KeyTerrainProvincial_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
ObservationBritish_All_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
ObservationBritish_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
ObservationBritish_HMSPreston	Feature Class	Point	This data provide the approximate location of the British observation point located on the flag ship HMS Preston. From this location fires on near by Noddles Island first alerted the British on Provincial actions. It was derived from historical sources.
ObservationBritish_HMSPrestonAnno	Annotation Class		This Annotation Class annotates the identified Feature Class.
ObservationBritish_Viewshed	Feature Class	Polygon	This data was created using viewshed analysis based on the DEM and British cannon position on top of Noddles Island Hill also known as West Bluff.
ObservationBritishHMSPreston_Viewshed	Feature Class	Polygon	This data was created using viewshed analysis based on the DEM and the location of the HMS Preston. The data was derived from historical sources.
ObservationProvincial_All	Feature Class	Point	This data provide the approximate location of the Provincial observation points. It was derived from historical sources.
ObservationProvincialAll_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
ObservationProvincialAll_Source	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
ObservationProvincialBelling	Feature Class	Point	This data provide the approximate location of the Provincial observation point on Mount Bellingham. The data was derived from historical sources.
ObservationProvincialBelling_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
ObservationProvincialBelling_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
ObservationProvincialBelling_Viewshed	Feature Class	Polygon	This data was created using viewshed analysis based on the DEM and the location of the Provincial observation point located on Mount Bellingham. The data was derived from historical sources.
ObservationProvincialMill	Feature Class	Point	This data provide the approximate location of the Provincial observation point on Mill Hill. The data was derived from historical sources.
ObservationProvincialMill_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
ObservationProvincialMill_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.

ObservationProvincialMill_Viewshed	Feature Class	Polygon	This data was created using viewshed analysis based on the DEM and the Provincial observation point on Mill Hill. The data was derived from historical sources.
Obstacles	Feature Class	Polygon	For this data, an obstacle is any natural or manmade obstruction that disrupts movement. The data was derived from historical sources and topographical analysis.
Obstacles_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Obstacles_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
Summits	Feature Class	Point	This data represent the locations of the highest points on the study site topography. Each point is identified by the summits name during the colonial period.
Summits_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Summits_Source	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
WithdrawalBritish	Feature Class	Polyline	This data represent the routes of withdrawal of British ground forces and was derived from historical sources.
WithdrawalBritish_Diana	Feature Class	Polyline	This data represent the routes of withdrawal of the HMS Diana and was derived from historical sources.
WithdrawalProvincial	Feature Class	Polyline	This data represent the routes of withdrawal of Provincial forces and was derived from historical sources.
BattlefieldBoundary	Feature Class	Polyline	This data provides a boundary for the major actions which took place during the Battle of Chelsea Creek. The boundary was created based on the locations of the defining features of the battle.
Current_Shoreline_1_1	Feature Class	Polyline	This data represents the 2005 shoreline and was derived from the MassGIS Towns layer.
CurrentShoreline_POLY	Feature Class	Polygon	This data represents the 2005 shoreline and was derived from the MassGIS Towns layer.
DEM	Raster Dataset	Raster	In order to carry out viewshed analysis and accurately depict 3 meter contours on the base map, it was necessary to create a digital elevation model (DEM) representing the 1775 topography. The DEM was produced through the integration of high resolution light detection and ranging (LIDAR) data, which provided coverage of the uplands, and constant value raster layers representing the intertidal and marine areas.
MA_Towns	Feature Class	Polygon	This data is the MassGIS Towns layer and represents 2005 Towns within and land area for Massachusetts.
Sources	Feature Table	Table	The Source Table provides the backbone for the Citation Data Model. The Source Table consists of the historical bibliographic and geographic sources used to create the GIS data and is linked to the Feature Classes displayed on the maps through one-to-one Relationship Classes. Sources used to create a particular Feature Class can be identified using the queried using the Identify tool in ArcGIS. All Feature Classes created from a particular source can also be queried in the same fashion.
StudySite_Towns	Feature Class	Polygon	This data is derived from the MassGIS Towns layer and represents 2005 Towns within and land area within the study site.
StudySiteTowns_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.

TimeSeries	Feature Dataset	Dataset	This dataset contains all data used in the production of the time series maps. Battle Phases were subjectively created in order to depict the battle within the GIS.
Phase1_BritishShips	Feature Class	Point	This data represents the approximate location of British Ships during Phase 1 of the Battle of Chelsea Creek.
Phase1_BritishShips_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase1_HMSDiana	Feature Class	Point	This data represents the approximate location of the HMS Diana during Phase 1 of the Battle of Chelsea Creek.
Phase1_HMSDiana_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase1_HMSPreston	Feature Class	Point	This data represents the approximate location of the HMS Diana during Phase 1 of the Battle of Chelsea Creek.
Phase1_HMSPreston_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase1_ProvincialAdvance	Feature Class	Polyline	This data represents the approximate location of the route of Provincial advance during Phase 1 of the Battle of Chelsea Creek.
Phase1_ProvincialAdvance_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase2_BritishAdvance	Feature Class		This data represents the approximate location of the route of British advance during Phase 2 of the Battle of Chelsea Creek.
Phase2_BritishAdvance_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase2_BritishShips	Feature Class	Point	This data represents the approximate location of the route of British advance during Phase 2 of the Battle of Chelsea Creek.
Phase2_BritishShips_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase2_FieldofFire	Feature Class	Point	This data represents the approximate location of the route of British advance during Phase 2 of the Battle of Chelsea Creek.
Phase2_HMSDiana1	Feature Class	Point	This data represents the approximate location of the route of British advance during Phase 2 of the Battle of Chelsea Creek.
Phase2_HMSDiana1_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase2_HMSDiana2	Feature Class	Point	This data represents the approximate location of the HMS Diana during Phase 2 of the Battle of Chelsea Creek.
Phase2_HMSDiana2_Anno_	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase2_HMSPreston	Feature Class	Point	This data represents the approximate location of the HMS Preston during Phase 2 of the Battle of Chelsea Creek.
Phase2_HMSPreston_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.

Phase2_LongBoats	Feature Class	Point	This data represents the approximate location of British long boats during Phase 2 of the Battle of Chelsea Creek.
Phase2_Marines	Feature Class	Point	This data represents the approximate location of British Marines during Phase 2 of the Battle of Chelsea Creek.
Phase2_NoddlesFires	Feature Class	Point	This data represents the approximate location of the fires set on Noddles Island by Provincial forces during Phase 2 of the Battle of Chelsea Creek.
Phase2_NoddlesFires_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase2_PrestonObservation	Feature Class	Point	This data represents the approximate location of the British observation position aboard the HMS Preston during Phase 2 of the Battle of Chelsea Creek.
Phase2_PrestonObservation_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase2_ProvincialObservation	Feature Class	Point	This data represents the approximate location of the Provincial observation position during Phase 2 of the Battle of Chelsea Creek.
Phase2_ProvincialObservation_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase2_ProvincialWithdrawal	Feature Class	Polyline	This data represents the approximate location of the route of Provincial withdrawal during Phase 2 of the Battle of Chelsea Creek.
Phase2_ProvincialWithdrawal_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase2_SmallArmsRange	Feature Class	Polyline	This data represents the range of small arms (80-100m) during Phase 2 of the Battle of Chelsea Creek.
Phase3_BritishShips	Feature Class	Point	This data represents the approximate location of British Ships during Phase 3 of the Battle of Chelsea Creek.
Phase3_BritishShips_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase3_BritishWithdrawal	Feature Class	Polyline	This data represents the approximate location of the route of British withdrawal during Phase 3 of the Battle of Chelsea Creek.
Phase3_BritishWithdrawal_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase3_CannonRange	Feature Class	Polyline	This data represents the range of cannon fire (1000m).
Phase3_HMSDiana	Feature Class	Point	This data represents the approximate position of the HMS Diana during the beginning of Phase 3 of the Battle of Chelsea Creek.
Phase3_HMSDiana2	Feature Class	Point	This data represents the approximate position of the HMS Diana during the end of Phase 3 of the Battle of Chelsea Creek.
Phase3_HMSDiana2_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase3_HMSDiana_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase3_HMSPreston_	Feature Class	Point	This data represents the approximate location of the HMS Preston during Phase 3 of the Battle of Chelsea Creek.

Phase3_LongBoats	Feature Class	Point	This data represents the approximate location of British long boats during Phase 3 of the Battle of Chelsea Creek.
Phase3_LongBoats2	Feature Class	Point	This data represents the approximate location of British long boats during Phase 3 of the Battle of Chelsea Creek.
Phase3_Marines	Feature Class	Point	This data represents the approximate location of British Marines during Phase 3 of the Battle of Chelsea Creek.
Phase3_Marines_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase3_NoddlesFires	Feature Class	Point	This data represents the approximate location of the fires set on Noddles Island by Provincial forces during Phase 3 of the Battle of Chelsea Creek.
Phase3_ProvincialWithdrawal	Feature Class	Polyline	This data represents the approximate location of the route of Provincial withdrawal during Phase 3 of the Battle of Chelsea Creek.
Phase3_ProvincialWithdrawal_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase3_SmallArms	Feature Class	Point	This data represents the approximate position of Provincial small arms positions during Phase 3 of the Battle of Chelsea Creek.
Phase3_SmallArms_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase3_SmallArms_Range	Feature Class	Polyline	This data represents the range of small arms (80-100m) during Phase 3 of the Battle of Chelsea Creek.
Phase4_BritishShips	Feature Class	Point	This data represents the approximate location of British Ships during Phase 4 of the Battle of Chelsea Creek.
Phase4_BritishShips_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase4_HMSDiana	Feature Class	Point	This data represents the two approximate positions of the HMS Diana during Phase 4 of the Battle of Chelsea Creek.
Phase4_HMSDiana_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase4_LongBoats	Feature Class	Point	This data represents the approximate location of British long boats during Phase 4 of the Battle of Chelsea Creek.
Phase4_Preston	Feature Class	Point	This data represents the approximate location of the HMS Preston during Phase 4 of the Battle of Chelsea Creek.
Phase4_ProvincialAdvance	Feature Class	Polyline	This data represents the approximate location of the route of Provincial advance during Phase 4 of the Battle of Chelsea Creek.
Phase4_ProvincialAdvance_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase4_ProvincialSmallArms	Feature Class	Point	This data represents the approximate position of Provincial small arms positions during Phase 3 of the Battle of Chelsea Creek.
Phase4_SmallArmsRange	Feature Class	Polyline	This data represents the range of small arms (80-100m) during Phase 4 of the Battle of Chelsea Creek.
Phase5_BritishShips	Feature Class	Point	This data represents the approximate location of British Ships during Phase 5 of the Battle of Chelsea Creek.

Phase5_BritishShips_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase5_CannonRange	Feature Class	Polyline	This data represents the range of cannon fire (1000m).
Phase5_Diana	Feature Class	Point	This data represents the approximate location of the HMS Diana during Phase 5 of the Battle of Chelsea Creek.
Phase5_Diana_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase5_FieldofFire	Feature Class	Point	This data represents the location of firing positions during Phase 5 of the Battle of Chelsea Creek.
Phase5_FieldofFire_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase5_Long_Boats_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase5_LongBoats	Feature Class	Point	This data represents the approximate location of British long boats during Phase 4 of the Battle of Chelsea Creek.
Phase5_LongBoats_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase5_Preston	Feature Class	Point	This data represents the approximate location of the HMS Preston during Phase 5 of the Battle of Chelsea Creek.
Phase5_ProvincialAdvance	Feature Class	Polyline	This data represents the approximate location of the route of Provincial advance during Phase 5 of the Battle of Chelsea Creek.
Phase5_ProvincialCannon	Feature Class	Point	This data represents the approximate position of the Provincial cannon position during Phase 5 of the Battle of Chelsea Creek.
Phase5_SmallArmsRange	Feature Class	Polyline	This data represents the range of small arms (80-100m) during Phase 5 of the Battle of Chelsea Creek.
Phase6_BritishShips	Feature Class	Point	This data represents the approximate location of British Ships during Phase 6 of the Battle of Chelsea Creek.
Phase6_BritishShips_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase6_CannonRange	Feature Class	Point	This data represents the range of cannon fire (1000m).
Phase6_FieldofFire	Feature Class	Point	This data represents the approximate position of Provincial small arms positions during Phase 6 of the Battle of Chelsea Creek.
Phase6_HMSDiana	Feature Class	Point	This data represents the approximate location of the HMS Diana during Phase 6 of the Battle of Chelsea Creek.
Phase6_HMSDiana_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase6_HMSDianaFire	Feature Class	Point	This data represents the approximate position of the HMS Diana when it was burned by Provincial forces during Phase 6 of the Battle of Chelsea Creek.
Phase6_HMSDianaFire_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.

Phase6_LongBoats	Feature Class	Point	This data represents the approximate location of British long boats during Phase 6 of the Battle of Chelsea Creek.
Phase6_SmallArmsFire	Feature Class	Point	This data represents the approximate position of Provincial small arms positions during Phase 6 of the Battle of Chelsea Creek.
Phase7_BritishShips	Feature Class	Point	This data represents the approximate location of British Ships during Phase 7 of the Battle of Chelsea Creek.
Phase7_BritishShips_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase7_HMSDiana	Feature Class	Point	This data represents the approximate location of the HMS Diana during Phase 7 of the Battle of Chelsea Creek.
Phase7_HMSDiana_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase7_HMSPreston	Feature Class	Point	This data represents the approximate location of the HMS Preston during Phase 7 of the Battle of Chelsea Creek.
Phase7_HMSPreston_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase7_LongBoats	Feature Class	Point	This data represents the approximate location of British long boats during Phase 7 of the Battle of Chelsea Creek.
Phase8_BritishShips	Feature Class	Point	This data represents the approximate location of British Ships during Phase 8 of the Battle of Chelsea Creek.
Phase8_HMSDiana	Feature Class	Point	This data represents the approximate location of the HMS Diana during Phase 8 of the Battle of Chelsea Creek.
Phase8_HMSDiana_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase8_HMSPreston	Feature Class	Point	This data represents the approximate location of the HMS Preston during Phase 8 of the Battle of Chelsea Creek.
Phase8_LongBoats	Feature Class	Point	This data represents the approximate location of British long boats during Phase 8 of the Battle of Chelsea Creek.
Phase8_ProvincialAdvance	Feature Class	Polyline	This data represents the approximate location of the route of Provincial advance during Phase 8 of the Battle of Chelsea Creek.
Phase8_ProvincialAdvance_Anno2	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase8_ProvincialWithdrawal	Feature Class	Polyline	This data represents the approximate location of the route of Provincial withdrawal during Phase 8 of the Battle of Chelsea Creek.
Phase8_ProvincialWithdrawal_Anno2	Annotation Class		This Annotation Class annotates the identified Feature Class.
HISTORIC_SOURCE_MAPS	Personal Geodatabase		
Bache_H1960_1847	Raster Dataset		Georeferenced historical map provided by the Massachusetts Office of Coastal Zone Management.

Bache_H850_1861	Raster Dataset		Georeferenced historical map provided by the Massachusetts Office of Coastal Zone Management.
Bache_T229_1847	Raster Dataset		Georeferenced historical map provided by the Massachusetts Office of Coastal Zone Management. The 1847 Coast Survey maps were used as the primary source for the projects base map.
Bache_T230_1847	Raster Dataset		Georeferenced historical map provided by the Massachusetts Office of Coastal Zone Management. The 1847 Coast Survey maps were used as the primary source for the projects base map.
Bache_T233_1847	Raster Dataset		Georeferenced historical map provided by the Massachusetts Office of Coastal Zone Management. The 1847 Coast Survey maps were used as the primary source for the projects base map.
Bache_T234_Bottom_1847	Raster Dataset		Georeferenced historical map provided by the Massachusetts Office of Coastal Zone Management. The 1847 Coast Survey maps were used as the primary source for the projects base map.
Bache_T234_Top_1847	Raster Dataset		Georeferenced historical map provided by the Massachusetts Office of Coastal Zone Management. The 1847 Coast Survey maps were used as the primary source for the projects base map.
Bache_W2777_1847	Raster Dataset		Georeferenced historical map provided by the Massachusetts Office of Coastal Zone Management.
Hills_1775	Raster Dataset		Georeferenced historical map provided by the Massachusetts Office of Coastal Zone Management.
Wadsworth_BostonHarbor_1817	Raster Dataset		Georeferenced historical map provided by the Massachusetts Office of Coastal Zone Management. This data was used for the secondary source and is not as accurate as the 1847 maps.
Wadsworth_H1961_1817	Raster Dataset		This data was provided un-registered by the US Geodetic database and is the original H-Sheet from the 1817 Coast Survey. The provided the location of shoreline features in the south western portion of the study site.
PRESERVATION_POTENTIAL	Personal Geodatabase		
ArcheologicalPotential	Feature Class	Point	This data are the locations of potential archeological resources associated with the Battle of Chelsea Creek. They were derived from historical sources, anecdotal accounts, and walk-over surveys.
Current_Shoreline_1	Feature Class	Polyline	This data represents the 2005 shoreline and was derived from the MassGIS Towns layer.
Current_Shoreline_Poly	Feature Class	Polygon	This data represents the 2005 shoreline and was derived from the MassGIS Towns layer.
DEM	Raster Dataset		In order to carry out viewshed analysis and accurately depict 3 meter contours on the base map, it was necessary to create a digital elevation model (DEM) representing the 1775 topography. The DEM was produced through the integration of high resolution light detection and ranging (LIDAR) data, which provided coverage of the uplands, and constant value raster layers representing the intertidal and marine areas.
DEM_Upland	Raster Dataset		In order to carry out viewshed analysis and accurately depict 3 meter contours on the base map, it was necessary to create a digital elevation model (DEM) representing the 1775 topography. The DEM was derived from high resolution light detection and ranging (LIDAR) data. The Upland layer was used to clip a portion of the 2002 Mass GIS LIDAR data set.

Dredged_Areas	Feature Class	Polygon	This data represents the dredged areas of the study site and were provided by CZM. These data are notoriously inaccurate and a higher resolution dataset would have been preferred.
Filled_Areas	Raster Dataset		This data represents areas of the study site that had been filled and or modified between 1775 and 2005. These areas may contain preserved areas of the landscape.
Open_Space	Feature Class	Polygon	This data represents areas of the study site that do not contain buildings and or pavement. It was derived through an analysis of the MassGIS land use data as well as a manual delineation of open fields and wooded areas. These areas may contain archeological and cultural resources associated with the battle and may provide the potential for preservation.
Preserved_Areas	Feature Class	Polygon	This data represents areas of the study site that may have preservation potential. It was derived using the spatial analysis tool and contain areas that have not been dredged or heavily developed.
Submerged_Areas	Raster Dataset		This data represents the locations of the historical landscape that has been submerged.
RASTERDATA	Personal Geodatabase		
DEM	Raster Dataset		In order to carry out viewshed analysis and accurately depict 3 meter contours on the base map, it was necessary to create a digital elevation model (DEM) representing the 1775 topography. The DEM was produced through the integration of high resolution light detection and ranging (LIDAR) data, which provided coverage of the uplands, and constant value raster layers representing the intertidal and marine areas.
ObservationBritish_Viewshed	Raster Dataset		This data was created using viewshed analysis based on the DEM and British cannon position on top of Noddles Island Hill also known as West Bluff.
ObservationProvincialBell_Viewshed	Raster Dataset		This data was created using viewshed analysis based on the DEM and the location of the Provincial observation point located on Mount Bellingham. The data was derived from historical sources.
ObservationViewshed_Preston	Raster Dataset		This data was created using viewshed analysis based on the DEM and the location of the HMS Preston. The data was derived from historical sources.
Upland_LIDAR_DEM	Raster Dataset		In order to carry out viewshed analysis and accurately depict 3 meter contours on the base map, it was necessary to create a digital elevation model (DEM) representing the 1775 topography. The DEM was derived from high resolution light detection and ranging (LIDAR) data. The Upland layer was used to clip a portion of the 2002 Mass GIS LIDAR data set.

APPENDIX C: CITATION DATA MODEL SOURCE TABLE AND DOMAINS

Battle of Chelsea Creek GIS		Metadata Table	Compiled by Chris Maio, Project GIS Consultant	
Name	Data Type	Feature Class Type	Description	
BASEMAP_KOCHOA	Personal Geodatabase		This Geodatabase houses all Base Map and KOCHOA related data.	
Archeological Potential	Feature Dataset	Dataset	Feature dataset associated with mapping the archeological potential of sites associated with the Battle of Chelsea Creek.	
Anno_ArchPotential_Findings	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.	
Anno_BattleEvents	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.	
ArcheologicalPotential_BattleEvents	Feature Class	Point	Locations of main battle events associated with the Battle of Chelsea Creek.	
ArcheologicalPotential_BattleEvents_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.	
BattleEvent_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.	
ArcheologicalPotential_Findings	Feature Class	Point	Location of anecdotal archeological findings associated with the Battle of Chelsea Creek	
ArcheologicalPotential_Findings_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.	
ArchPotential_Findings_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.	
Current_Shoreline_1	Feature Class	Polyline	2005 shoreline derived from the MassGIS Towns layer used for comparison with historical shoreline.	
Current_Shoreline_Poly	Feature Class	Polygon	2005 shoreline derived from the MassGIS Towns layer used for comparison with historical shoreline.	
Towns_Current_	Feature Class	Polygon	This polygon layer consists of all towns in Massachusetts and was provided as the MassGIS Towns layer.	
Towns_Current_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.	
Basemap	Feature Dataset	Dataset	This Feature Dataset consists of all layers which make up the historical base map.	
Anno_Roads	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.	

Anno_Saltmarshes	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_Upland	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_Waterbodies	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_Wharfs	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Buildings	Feature Class	Polygon	This layer consists of the major historical buildings within the areas associated with the Battle of Chelsea Creek.
Buildings_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Buildings_Source	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
Contours_3m	Feature Class	Polyline	These contours were produced utilizing the 2002 LIDAR derived DEM of the upland areas of the study site. It was determined that these areas had experienced only small modifications during the period between 1775 and 2002.
CurrentShoreline	Feature Class	Polyline	This data represents the 2005 shoreline of Boston Harbor and is derived from the MassGIS Towns layer.
LowWater	Feature Class	Polygon	This data represents the low water areas shown on the 1847 Coast Survey maps and the H-850-1861 (In area of Winnisimmet).
LowWater_Source	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
NavigableWater	Feature Class	Polygon	This data represents the navigable waters shown on the 1847 Coast Survey maps.
Navigable Water_Line	Feature Class	Polyline	This data was created by converting the navigable water polygon into a polyline and represents the threshold between low water and navigable water.
Navigable Water_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
Roads	Feature Class	Polygon	This data represents the major roads of the area associated with the Battle of Chelsea Creek. They were digitized from the 1847 Coast Survey maps as well as other historical cartographic and bibliographic sources. These data do not accurately represent all roads in existence in 1775. It also may include some roads that were developed after 1775. The accuracy of these data can be clearly seen when overlaying the data over a current orthophotograph.
Roads_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Roads_Line	Feature Class	Polyline	This data was created by converting the roads polygon file to a polyline file. It represents the major roads of the area associated with the Battle of Chelsea Creek. They were digitized from the 1847 Coast Survey maps as well as other historical cartographic and bibliographic sources. These data do not accurately represent all roads in existence in 1775. It also may include some roads that were developed after 1775. The accuracy of these data can be clearly seen when overlaying the data over a current orthophotograph.

Roads_Source	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
Saltmarshes	Feature Class	Polygon	This data represents all of the saltmarsh and wetland areas within the study site and was derived from the 1847 Coast Survey Map.
Saltmarshes_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Saltmarshes_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
Shorelines	Feature Class	Polyline	This data represents the 1775 shoreline and was derived from the 1847 Coast Survey maps as the primary source and the 1817 Coast Survey maps as the secondary source. Other historical maps were also used in the areas of Boston and Charlestown. This data was the foundation for the entire dataset and is the primary feature in the Chelsea Creek dataset.
Study Site	Feature Class	Polyline	This data represents the area included for the geospatial analysis of the Battle of Chelsea Creek. It was necessary to create this spatial limitation as including surrounding areas was well beyond the scope of this project.
Study Site	Feature Class	Polygon	This data represents the area included for the geospatial analysis of the Battle of Chelsea Creek. It was necessary to create this spatial limitation as including surrounding areas was well beyond the scope of this project.
Trees	Feature Class	Point	This data represents major areas of vegetation and tree cover during 1775. The data was subjectively created based on several historical maps and should not be considered a definitive representation of all trees in existence during 1775.
Trees_Source	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
Upland	Feature Class	Polygon	This data represents the terrestrial areas of the study site which do not include saltmarshes and wetlands. It was primarily derived from the 1847 Coast Survey maps.
Upland_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Upland_Source	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
Waterbodies	Feature Class	Polygon	This data represents all major hydrographic features within the study site and includes both navigable and low waters.
Waterbodies_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Waterbodies_Source	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
Waterline	Feature Class	Polyline	This data represents linear hydrographic features within the study site including small rivers and tidal creeks.
Wharfs	Feature Class	Polygon	This data represents the wharf in existence in 1775 and were derived from Coast Survey maps. This data likely includes wharfs not in existence in 1775 especially in the areas of Boston and Charlestown. This data should not be considered a definitive source of 1775 wharf as many of the maps during that time period did not accurately portray these features.
Wharfs_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.

Wharfs_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
KOCOA	Feature Dataset	Dataset	This feature dataset contains all KOCOA data.
AdvanceBritish	Feature Class	Polyline	This data represents the routes of approach for British land and sea forces during the Battle of Chelsea Creek. They were derived from historical accounts.
AdvanceProvincial	Feature Class	Polyline	This data represents the routes of approach for American Provincial forces during the Battle of Chelsea Creek. They were derived from historical accounts.
Anno_Battle_Events	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_BattleEventPoint	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_BritishShips	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_CoverConcealment	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_DefiningFeatures	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_FieldofFire_BritishSmArms	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_FieldofFire_NavalForces	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_FieldofFireBritishCannon	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_FieldofFireProvincialSmArms	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_HistoricLocations	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_KeyTerrainBritish	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_KeyTerrainProvincial	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_ObservationBritishAll	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_ObservationBritishHMSPreston	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_ObservationProvincialBelling	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_ObservationProvincialMill	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.

Anno_ObservationProvincialAll	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_Obstacles	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
Anno_Summits	Relationship Class		This Relationship Class relates the Feature Class to its Annotation Class.
BattleEvents	Feature Class	Point	This data represents the general locations of the major battle events and were derived from historical accounts.
BattleEvents_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
BattleEvents_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
BritishShips	Feature Class	Point	This data represents the general locations of British Naval forces taking part in the Battle of Chelsea Creek.
BritishShips_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
CoverandConcealment	Feature Class	Polygon	This data represents areas that provided cover or concealment to both British and Provincial forces during the Battle of Chelsea Creek.
CoverandConcealment_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
CoverandConcealment_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
DefiningFeatures	Feature Class	Point	This data represents the approximate locations of the defining features of the Battle of Chelsea Creek. Each component of the KOCOA analysis illustrates features of the battlefield. Critical defining features are those that were significant to the outcome of the battle.
DefiningFeatures_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
DefiningFeatures_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
Diana_possibleRoute	Feature Class	Polyline	This data represents one of the possible routes used by the HMS Diana at the headwaters of Chelsea Creek. The data was derived by historical sources and bathymetric analysis.
FieldofFire_BritishSmallArms	Feature Class	Point	This data represents the approximate firing positions of British forces and were derived from historical sources.
FieldofFire_BritishSmallArms_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
FieldofFire_BritishSmallArms_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
FieldofFire_BritishCannon_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
FieldofFire_CannonRange_	Feature Class	Polyline	This data represents the approximate range of Provincial and British Cannon range (1000 m). The data was derived from historical sources.

FieldofFire_LongBoats	Feature Class	Point	This data represents the location of British firing positions from their longboats. The data was derived from historical sources.
FieldofFire_NavalForces	Feature Class	Point	This data represents the location of British firing positions from their ships. The data was derived from historical sources.
FieldofFire_ProvincialSmallArms	Feature Class	Point	This data represents the approximate locations of Provincial firing positions. It was derived from historical sources.
FieldofFire_ProvincialSmallArms_Anno	Feature Class		This Annotation Class annotates the identified Feature Class.
FieldofFire_ProvincialSmallArms_Sources	Annotation Class		This Annotation Class annotates the identified Feature Class.
FieldofFire_SmallArmsRange	Feature Class	Polyline	This data represents the range of small arms fire (80-100 m).
FieldofFireBritishCannon	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
FieldofFireBritishCannon_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
FieldofFire_BritishCannon	Feature Class	Point	This data represents the approximate location of the British cannon position on Noddles Island Hill.
FieldofFire_ProvincialCannon	Feature Class	Point	This data represents the approximate location of the Provincial cannon positions and is derived from historical sources.
FieldofFireProvincialCannon_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
FieldofFireProvincialCannon_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
HistoricLocations	Feature Class	Point	This data represents the approximate location of historical events pertaining to the Battle of Chelsea Creek. It was derived from historical sources.
HistoricLocations_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
HistoricLocations_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
HMSDiana	Feature Class	Point	This data represents one of the positions of the HMS Diana and was derived from historical sources.
HMSDiana_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
KeyTerrainBritish	Feature Class	Polygon	Noddles Island Hill provided key terrain for British forces. This location provided observation points and firing positions that commanded important sections of the battlefield. The data was derived from historical sources and topographical analysis.
KeyTerrainBritish_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
KeyTerrainBritish_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
KeyTerrainProvincial	Feature Class	Polygon	Mount Bellingham and Mill Hill provided key terrain for provincial forces. These points provided observation points and firing positions that commanded important sections of the

			battlefield. The data was derived from historical sources and topographical analysis.
KeyTerrainProvincial_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
ObservationBritish_All	Feature Class	Point	This data represents the observation locations for British forces and was derived from historical sources and topographical analysis.
KeyTerrainProvincial_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
ObservationBritish_All_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
ObservationBritish_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
ObservationBritish_HMSPreston	Feature Class	Point	This data provide the approximate location of the British observation point located on the flag ship HMS Preston. From this location fires on near by Noddles Island first alerted the British on Provincial actions. It was derived from historical sources.
ObservationBritish_HMSPrestonAnno	Annotation Class		This Annotation Class annotates the identified Feature Class.
ObservationBritish_Viewshed	Feature Class	Polygon	This data was created using viewshed analysis based on the DEM and British cannon position on top of Noddles Island Hill also known as West Bluff.
ObservationBritishHMSPreston_Viewshed	Feature Class	Polygon	This data was created using viewshed analysis based on the DEM and the location of the HMS Preston. The data was derived from historical sources.
ObservationProvincial_All	Feature Class	Point	This data provide the approximate location of the Provincial observation points. It was derived from historical sources.
ObservationProvincialAll_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
ObservationProvincialAll_Source	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
ObservationProvincialBelling	Feature Class	Point	This data provide the approximate location of the Provincial observation point on Mount Bellingham. The data was derived from historical sources.
ObservationProvincialBelling_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
ObservationProvincialBelling_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
ObservationProvincialBelling_Viewshed	Feature Class	Polygon	This data was created using viewshed analysis based on the DEM and the location of the Provincial observation point located on Mount Bellingham. The data was derived from historical sources.
ObservationProvincialMill	Feature Class	Point	This data provide the approximate location of the Provincial observation point on Mill Hill. The data was derived from historical sources.
ObservationProvincialMill_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
ObservationProvincialMill_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.

ObservationProvincialMill_Viewshed	Feature Class	Polygon	This data was created using viewshed analysis based on the DEM and the Provincial observation point on Mill Hill. The data was derived from historical sources.
Obstacles	Feature Class	Polygon	For this data, an obstacle is any natural or manmade obstruction that disrupts movement. The data was derived from historical sources and topographical analysis.
Obstacles_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Obstacles_Sources	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
Summits	Feature Class	Point	This data represent the locations of the highest points on the study site topography. Each point is identified by the summits name during the colonial period.
Summits_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Summits_Source	Relationship Class		This Relationship Class relates the Feature Class to the historical bibliographic Source Table and is part of the Citation Data Model.
WithdrawalBritish	Feature Class	Polyline	This data represent the routes of withdrawal of British ground forces and was derived from historical sources.
WithdrawalBritish_Diana	Feature Class	Polyline	This data represent the routes of withdrawal of the HMS Diana and was derived from historical sources.
WithdrawalProvincial	Feature Class	Polyline	This data represent the routes of withdrawal of Provincial forces and was derived from historical sources.
BattlefieldBoundary	Feature Class	Polyline	This data provides a boundary for the major actions which took place during the Battle of Chelsea Creek. The boundary was created based on the locations of the defining features of the battle.
Current_Shoreline_1_1	Feature Class	Polyline	This data represents the 2005 shoreline and was derived from the MassGIS Towns layer.
CurrentShoreline_POLY	Feature Class	Polygon	This data represents the 2005 shoreline and was derived from the MassGIS Towns layer.
DEM	Raster Dataset	Raster	In order to carry out viewshed analysis and accurately depict 3 meter contours on the base map, it was necessary to create a digital elevation model (DEM) representing the 1775 topography. The DEM was produced through the integration of high resolution light detection and ranging (LIDAR) data, which provided coverage of the uplands, and constant value raster layers representing the intertidal and marine areas.
MA_Towns	Feature Class	Polygon	This data is the MassGIS Towns layer and represents 2005 Towns within and land area for Massachusetts.
Sources	Feature Table	Table	The Source Table provides the backbone for the Citation Data Model. The Source Table consists of the historical bibliographic and geographic sources used to create the GIS data and is linked to the Feature Classes displayed on the maps through one-to-one Relationship Classes. Sources used to create a particular Feature Class can be identified using the queried using the Identify tool in ArcGIS. All Feature Classes created from a particular source can also be queried in the same fashion.
StudySite_Towns	Feature Class	Polygon	This data is derived from the MassGIS Towns layer and represents 2005 Towns within and land area within the study site.
StudySiteTowns_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.

TimeSeries	Feature Dataset	Dataset	This dataset contains all data used in the production of the time series maps. Battle Phases were subjectively created in order to depict the battle within the GIS.
Phase1_BritishShips	Feature Class	Point	This data represents the approximate location of British Ships during Phase 1 of the Battle of Chelsea Creek.
Phase1_BritishShips_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase1_HMSDiana	Feature Class	Point	This data represents the approximate location of the HMS Diana during Phase 1 of the Battle of Chelsea Creek.
Phase1_HMSDiana_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase1_HMSPreston	Feature Class	Point	This data represents the approximate location of the HMS Diana during Phase 1 of the Battle of Chelsea Creek.
Phase1_HMSPreston_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase1_ProvincialAdvance	Feature Class	Polyline	This data represents the approximate location of the route of Provincial advance during Phase 1 of the Battle of Chelsea Creek.
Phase1_ProvincialAdvance_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase2_BritishAdvance	Feature Class		This data represents the approximate location of the route of British advance during Phase 2 of the Battle of Chelsea Creek.
Phase2_BritishAdvance_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase2_BritishShips	Feature Class	Point	This data represents the approximate location of the route of British advance during Phase 2 of the Battle of Chelsea Creek.
Phase2_BritishShips_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase2_FieldofFire	Feature Class	Point	This data represents the approximate location of the route of British advance during Phase 2 of the Battle of Chelsea Creek.
Phase2_HMSDiana1	Feature Class	Point	This data represents the approximate location of the route of British advance during Phase 2 of the Battle of Chelsea Creek.
Phase2_HMSDiana1_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase2_HMSDiana2	Feature Class	Point	This data represents the approximate location of the HMS Diana during Phase 2 of the Battle of Chelsea Creek.
Phase2_HMSDiana2_Anno_	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase2_HMSPreston	Feature Class	Point	This data represents the approximate location of the HMS Preston during Phase 2 of the Battle of Chelsea Creek.
Phase2_HMSPreston_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.

Phase2_LongBoats	Feature Class	Point	This data represents the approximate location of British long boats during Phase 2 of the Battle of Chelsea Creek.
Phase2_Marines	Feature Class	Point	This data represents the approximate location of British Marines during Phase 2 of the Battle of Chelsea Creek.
Phase2_NoddlesFires	Feature Class	Point	This data represents the approximate location of the fires set on Noddles Island by Provincial forces during Phase 2 of the Battle of Chelsea Creek.
Phase2_NoddlesFires_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase2_PrestonObservation	Feature Class	Point	This data represents the approximate location of the British observation position aboard the HMS Preston during Phase 2 of the Battle of Chelsea Creek.
Phase2_PrestonObservation_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase2_ProvincialObservation	Feature Class	Point	This data represents the approximate location of the Provincial observation position during Phase 2 of the Battle of Chelsea Creek.
Phase2_ProvincialObservation_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase2_ProvincialWithdrawal	Feature Class	Polyline	This data represents the approximate location of the route of Provincial withdrawal during Phase 2 of the Battle of Chelsea Creek.
Phase2_ProvincialWithdrawal_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase2_SmallArmsRange	Feature Class	Polyline	This data represents the range of small arms (80-100m) during Phase 2 of the Battle of Chelsea Creek.
Phase3_BritishShips	Feature Class	Point	This data represents the approximate location of British Ships during Phase 3 of the Battle of Chelsea Creek.
Phase3_BritishShips_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase3_BritishWithdrawal	Feature Class	Polyline	This data represents the approximate location of the route of British withdrawal during Phase 3 of the Battle of Chelsea Creek.
Phase3_BritishWithdrawal_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase3_CannonRange	Feature Class	Polyline	This data represents the range of cannon fire (1000m).
Phase3_HMSDiana	Feature Class	Point	This data represents the approximate position of the HMS Diana during the beginning of Phase 3 of the Battle of Chelsea Creek.
Phase3_HMSDiana2	Feature Class	Point	This data represents the approximate position of the HMS Diana during the end of Phase 3 of the Battle of Chelsea Creek.
Phase3_HMSDiana2_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase3_HMSDiana_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase3_HMSPreston_	Feature Class	Point	This data represents the approximate location of the HMS Preston during Phase 3 of the Battle of Chelsea Creek.

Phase3_LongBoats	Feature Class	Point	This data represents the approximate location of British long boats during Phase 3 of the Battle of Chelsea Creek.
Phase3_LongBoats2	Feature Class	Point	This data represents the approximate location of British long boats during Phase 3 of the Battle of Chelsea Creek.
Phase3_Marines	Feature Class	Point	This data represents the approximate location of British Marines during Phase 3 of the Battle of Chelsea Creek.
Phase3_Marines_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase3_NoddlesFires	Feature Class	Point	This data represents the approximate location of the fires set on Noddles Island by Provincial forces during Phase 3 of the Battle of Chelsea Creek.
Phase3_ProvincialWithdrawal	Feature Class	Polyline	This data represents the approximate location of the route of Provincial withdrawal during Phase 3 of the Battle of Chelsea Creek.
Phase3_ProvincialWithdrawal_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase3_SmallArms	Feature Class	Point	This data represents the approximate position of Provincial small arms positions during Phase 3 of the Battle of Chelsea Creek.
Phase3_SmallArms_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase3_SmallArms_Range	Feature Class	Polyline	This data represents the range of small arms (80-100m) during Phase 3 of the Battle of Chelsea Creek.
Phase4_BritishShips	Feature Class	Point	This data represents the approximate location of British Ships during Phase 4 of the Battle of Chelsea Creek.
Phase4_BritishShips_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase4_HMSDiana	Feature Class	Point	This data represents the two approximate positions of the HMS Diana during Phase 4 of the Battle of Chelsea Creek.
Phase4_HMSDiana_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase4_LongBoats	Feature Class	Point	This data represents the approximate location of British long boats during Phase 4 of the Battle of Chelsea Creek.
Phase4_Preston	Feature Class	Point	This data represents the approximate location of the HMS Preston during Phase 4 of the Battle of Chelsea Creek.
Phase4_ProvincialAdvance	Feature Class	Polyline	This data represents the approximate location of the route of Provincial advance during Phase 4 of the Battle of Chelsea Creek.
Phase4_ProvincialAdvance_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase4_ProvincialSmallArms	Feature Class	Point	This data represents the approximate position of Provincial small arms positions during Phase 3 of the Battle of Chelsea Creek.
Phase4_SmallArmsRange	Feature Class	Polyline	This data represents the range of small arms (80-100m) during Phase 4 of the Battle of Chelsea Creek.
Phase5_BritishShips	Feature Class	Point	This data represents the approximate location of British Ships during Phase 5 of the Battle of Chelsea Creek.

Phase5_BritishShips_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase5_CannonRange	Feature Class	Polyline	This data represents the range of cannon fire (1000m).
Phase5_Diana	Feature Class	Point	This data represents the approximate location of the HMS Diana during Phase 5 of the Battle of Chelsea Creek.
Phase5_Diana_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase5_FieldofFire	Feature Class	Point	This data represents the location of firing positions during Phase 5 of the Battle of Chelsea Creek.
Phase5_FieldofFire_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase5_Long_Boats_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase5_LongBoats	Feature Class	Point	This data represents the approximate location of British long boats during Phase 4 of the Battle of Chelsea Creek.
Phase5_LongBoats_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase5_Preston	Feature Class	Point	This data represents the approximate location of the HMS Preston during Phase 5 of the Battle of Chelsea Creek.
Phase5_ProvincialAdvance	Feature Class	Polyline	This data represents the approximate location of the route of Provincial advance during Phase 5 of the Battle of Chelsea Creek.
Phase5_ProvincialCannon	Feature Class	Point	This data represents the approximate position of the Provincial cannon position during Phase 5 of the Battle of Chelsea Creek.
Phase5_SmallArmsRange	Feature Class	Polyline	This data represents the range of small arms (80-100m) during Phase 5 of the Battle of Chelsea Creek.
Phase6_BritishShips	Feature Class	Point	This data represents the approximate location of British Ships during Phase 6 of the Battle of Chelsea Creek.
Phase6_BritishShips_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase6_CannonRange	Feature Class	Point	This data represents the range of cannon fire (1000m).
Phase6_FieldofFire	Feature Class	Point	This data represents the approximate position of Provincial small arms positions during Phase 6 of the Battle of Chelsea Creek.
Phase6_HMSDiana	Feature Class	Point	This data represents the approximate location of the HMS Diana during Phase 6 of the Battle of Chelsea Creek.
Phase6_HMSDiana_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase6_HMSDianaFire	Feature Class	Point	This data represents the approximate position of the HMS Diana when it was burned by Provincial forces during Phase 6 of the Battle of Chelsea Creek.
Phase6_HMSDianaFire_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.

Phase6_LongBoats	Feature Class	Point	This data represents the approximate location of British long boats during Phase 6 of the Battle of Chelsea Creek.
Phase6_SmallArmsFire	Feature Class	Point	This data represents the approximate position of Provincial small arms positions during Phase 6 of the Battle of Chelsea Creek.
Phase7_BritishShips	Feature Class	Point	This data represents the approximate location of British Ships during Phase 7 of the Battle of Chelsea Creek.
Phase7_BritishShips_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase7_HMSDiana	Feature Class	Point	This data represents the approximate location of the HMS Diana during Phase 7 of the Battle of Chelsea Creek.
Phase7_HMSDiana_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase7_HMSPreston	Feature Class	Point	This data represents the approximate location of the HMS Preston during Phase 7 of the Battle of Chelsea Creek.
Phase7_HMSPreston_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase7_LongBoats	Feature Class	Point	This data represents the approximate location of British long boats during Phase 7 of the Battle of Chelsea Creek.
Phase8_BritishShips	Feature Class	Point	This data represents the approximate location of British Ships during Phase 8 of the Battle of Chelsea Creek.
Phase8_HMSDiana	Feature Class	Point	This data represents the approximate location of the HMS Diana during Phase 8 of the Battle of Chelsea Creek.
Phase8_HMSDiana_Anno	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase8_HMSPreston	Feature Class	Point	This data represents the approximate location of the HMS Preston during Phase 8 of the Battle of Chelsea Creek.
Phase8_LongBoats	Feature Class	Point	This data represents the approximate location of British long boats during Phase 8 of the Battle of Chelsea Creek.
Phase8_ProvincialAdvance	Feature Class	Polyline	This data represents the approximate location of the route of Provincial advance during Phase 8 of the Battle of Chelsea Creek.
Phase8_ProvincialAdvance_Anno2	Annotation Class		This Annotation Class annotates the identified Feature Class.
Phase8_ProvincialWithdrawal	Feature Class	Polyline	This data represents the approximate location of the route of Provincial withdrawal during Phase 8 of the Battle of Chelsea Creek.
Phase8_ProvincialWithdrawal_Anno2	Annotation Class		This Annotation Class annotates the identified Feature Class.
HISTORIC_SOURCE_MAPS	Personal Geodatabase		
Bache_H1960_1847	Raster Dataset		Georeferenced historical map provided by the Massachusetts Office of Coastal Zone Management.

Bache_H850_1861	Raster Dataset		Georeferenced historical map provided by the Massachusetts Office of Coastal Zone Management.
Bache_T229_1847	Raster Dataset		Georeferenced historical map provided by the Massachusetts Office of Coastal Zone Management. The 1847 Coast Survey maps were used as the primary source for the projects base map.
Bache_T230_1847	Raster Dataset		Georeferenced historical map provided by the Massachusetts Office of Coastal Zone Management. The 1847 Coast Survey maps were used as the primary source for the projects base map.
Bache_T233_1847	Raster Dataset		Georeferenced historical map provided by the Massachusetts Office of Coastal Zone Management. The 1847 Coast Survey maps were used as the primary source for the projects base map.
Bache_T234_Bottom_1847	Raster Dataset		Georeferenced historical map provided by the Massachusetts Office of Coastal Zone Management. The 1847 Coast Survey maps were used as the primary source for the projects base map.
Bache_T234_Top_1847	Raster Dataset		Georeferenced historical map provided by the Massachusetts Office of Coastal Zone Management. The 1847 Coast Survey maps were used as the primary source for the projects base map.
Bache_W2777_1847	Raster Dataset		Georeferenced historical map provided by the Massachusetts Office of Coastal Zone Management.
Hills_1775	Raster Dataset		Georeferenced historical map provided by the Massachusetts Office of Coastal Zone Management.
Wadsworth_BostonHarbor_1817	Raster Dataset		Georeferenced historical map provided by the Massachusetts Office of Coastal Zone Management. This data was used for the secondary source and is not as accurate as the 1847 maps.
Wadsworth_H1961_1817	Raster Dataset		This data was provided un-registered by the US Geodetic database and is the original H-Sheet from the 1817 Coast Survey. The provided the location of shoreline features in the south western portion of the study site.
PRESERVATION_POTENTIAL	Personal Geodatabase		
ArcheologicalPotential	Feature Class	Point	This data are the locations of potential archeological resources associated with the Battle of Chelsea Creek. They were derived from historical sources, anecdotal accounts, and walk-over surveys.
Current_Shoreline_1	Feature Class	Polyline	This data represents the 2005 shoreline and was derived from the MassGIS Towns layer.
Current_Shoreline_Poly	Feature Class	Polygon	This data represents the 2005 shoreline and was derived from the MassGIS Towns layer.
DEM	Raster Dataset		In order to carry out viewshed analysis and accurately depict 3 meter contours on the base map, it was necessary to create a digital elevation model (DEM) representing the 1775 topography. The DEM was produced through the integration of high resolution light detection and ranging (LIDAR) data, which provided coverage of the uplands, and constant value raster layers representing the intertidal and marine areas.
DEM_Upland	Raster Dataset		In order to carry out viewshed analysis and accurately depict 3 meter contours on the base map, it was necessary to create a digital elevation model (DEM) representing the 1775 topography. The DEM was derived from high resolution light detection and ranging (LIDAR) data. The Upland layer was used to clip a portion of the 2002 Mass GIS LIDAR data set.

Dredged_Areas	Feature Class	Polygon	This data represents the dredged areas of the study site and were provided by CZM. These data are notoriously inaccurate and a higher resolution dataset would have been preferred.
Filled_Areas	Raster Dataset		This data represents areas of the study site that had been filled and or modified between 1775 and 2005. These areas may contain preserved areas of the landscape.
Open_Space	Feature Class	Polygon	This data represents areas of the study site that do not contain buildings and or pavement. It was derived through an analysis of the MassGIS land use data as well as a manual delineation of open fields and wooded areas. These areas may contain archeological and cultural resources associated with the battle and may provide the potential for preservation.
Preserved_Areas	Feature Class	Polygon	This data represents areas of the study site that may have preservation potential. It was derived using the spatial analysis tool and contain areas that have not been dredged or heavily developed.
Submerged_Areas	Raster Dataset		This data represents the locations of the historical landscape that has been submerged.
RASTERDATA	Personal Geodatabase		
DEM	Raster Dataset		In order to carry out viewshed analysis and accurately depict 3 meter contours on the base map, it was necessary to create a digital elevation model (DEM) representing the 1775 topography. The DEM was produced through the integration of high resolution light detection and ranging (LIDAR) data, which provided coverage of the uplands, and constant value raster layers representing the intertidal and marine areas.
ObservationBritish_Viewshed	Raster Dataset		This data was created using viewshed analysis based on the DEM and British cannon position on top of Noddles Island Hill also known as West Bluff.
ObservationProvincialBell_Viewshed	Raster Dataset		This data was created using viewshed analysis based on the DEM and the location of the Provincial observation point located on Mount Bellingham. The data was derived from historical sources.
ObservationViewshed_Preston	Raster Dataset		This data was created using viewshed analysis based on the DEM and the location of the HMS Preston. The data was derived from historical sources.
Upland_LIDAR_DEM	Raster Dataset		In order to carry out viewshed analysis and accurately depict 3 meter contours on the base map, it was necessary to create a digital elevation model (DEM) representing the 1775 topography. The DEM was derived from high resolution light detection and ranging (LIDAR) data. The Upland layer was used to clip a portion of the 2002 Mass GIS LIDAR data set.

APPENDIX D: SHAPE FILES

compiled by

Christopher V. Maio

(electronic file only)

APPENDIX E: LIST OF PARCELS*

CHELSEA, EAST BOSTON, AND REVERE SUFFOLK COUNTY, MASSACHUSETTS

(electronic file only)

*While a goal of this study was to identify all property owners within the battlefield, there are tens of thousands of resident structures and commercial and industrial facilities currently occupying the lands that comprise the battlefield. The size and complexity of the task of creating a comprehensive list of property owners could not be reasonably accomplished within this initial phase of research. MassGIS has a parcel map data layer which includes the communities of (East) Boston, Chelsea, and Revere. Winthrop is not included in this data layer at this time. Unfortunately, this data layer identifies 10,860 separate parcels, but does not provide names of the owners of individual parcels.