Deconstructing City Hall Park: The Development and Archaeology of the Common

Alyssa Loorya

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DECONSTRUCTING CITY HALL PARK: THE DEVELOPMENT AND ARCHAEOLOGY OF THE COMMON

by

ALYSSA LOORYA

A dissertation submitted to the Graduate Faculty in Anthropology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York

2018
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by

Alyssa Loorya

This manuscript has been read and accepted for the Graduate Faculty in Anthropology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

Date

Sophia Perdikaris
Chair of Examining Committee

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Jeff Maskovsky
Executive Officer

Supervisory Committee:

Meta Janowitz
James Moore
William Parry

THE CITY UNIVERSITY OF NEW YORK
ABSTRACT

Deconstructing City Hall Park: The Development and Archaeology of the Common

by

Alyssa Loorya

Advisor: Dr. Sophia Perdikaris

City Hall Park in lower Manhattan, once known as The Common, has a long history of public use dating as far back as the Dutch in the seventeenth century. As the site has been continually occupied for almost 400 years, it is an integral part of New York City’s only recognized Archaeological District. Over half a million artifacts, numerous structural features, and human burials have been recovered and documented on archaeological projects since the 1980s.

While archaeological work at City Hall Park has been undertaken multiple times by multiple archaeologists, all have been instigated by construction projects. As a result, archaeology at the site has been conducted exclusively by cultural resource management (CRM) firms for the purpose of Section 106 compliance. Unfortunately, as they were part of construction based endeavors that placed several constraints on the archaeological work, each CRM project used varying methodologies and levels of recording. This has led to significant gaps in data recovery.

Additionally, in large part because the projects occurred independently of one another, no report has ever synthesized the copious amounts of documented archaeological resources and information into a single source.

These issues came to the fore during a 2010 CRM City Hall Park project led by Alyssa Loorya. Significant data was found to be incomplete or missing from the reports of previous projects, negatively impacting the accuracy of current fieldwork and interpretations.

Therefore, the goal of this dissertation is to design a process, or methodology, for synthesizing the data derived from multiple cultural resource management projects into a cohesive interpretive dataset. A major component of this process is the creation of the City Hall Archaeological Resources Map (CHARM), a comprehensive map that combines all of the available data into a single, visible resource. CHARM ultimately seeks to reconcile the available data into a baseline analysis and interpretation in order to facilitate future research about the Common and City Hall Park.
ACKNOWLEDGEMENTS

I am grateful to, and thankful for, so many people who have been a part of this journey, both academic and historic, too many to remember and adequately thank in a few short sentences.

I am very fortunate to have had the opportunity to work on this amazing historic site. Thank you, Richard Southwick and Beyer, Blinder Belle for that opportunity. Also, this dissertation would not be possible without the work of all those who excavated and researched City Hall Park before me. Thank you to all of them.

I could not have done this without my amazing field crew – Dan Eichinger, Eileen Krall Hood, Lisa Geiger and Eileen Kao – who always went the extra mile for me. Fred Weiss and the Rockmore crew were the best construction contractor I could have hoped for because they truly appreciated the history and archaeology. The artifact analysis would not be what it is without Meta Janowitz. Dan and Meta helped shaped the interpretation of the work we undertook in 2010 as we hammered out ideas with good humor through track changes and comments in a Word document. Thank you all of you!

So many people have in some way contributed to this through one phase or another. There are those who have helped shape the archaeologist that I am, and many who provided professional and/or personal encouragement. Some joined in at the tail end but are equally important and appreciated.

First among my thanks though is to my parents, Brenda and Jan Loorya, who gave me the best opportunities, experiences and education any kid could hope for. I could, and can, always count on their love and support. I am eternally grateful for them.

Endless thanks and appreciation goes to Christopher Ricciardi, my partner and unswerving supporter in so many things. He has been through the many of the ups and downs of this process with me. And thank you to all the Ricciardis for their ongoing love and support, especially Millie and Charlie.

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I am indebted to all the members of my committee: Dr. Meta Janowitz, Dr. James A. Moore, Dr. William Parry, and my chair Dr. Sophia Perdikaris. You have all helped and guided me in various ways over the many years and I appreciate and thank each of you.

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crew, past and present, for keeping things together while I finished this. Thank you to the friends who supported me behind the scenes.

Finally, more than anything, I am indebted to the hundreds of deserving and underserving poor, British soldiers, builders, and workers who lived, worked, and often died on the Common, today’s City Hall Park. Most of their names may be lost to history but they left their mark. This is their story.
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I: INTRODUCTION

City Hall Park is an 8.8-acre parcel of land located in lower Manhattan in the City of New York (Map 1.01). The park has an almost 300-year history of use as a public space, beginning as a cow pasture in the 1600s. In general, the history of City Hall Park is well documented and a careful reading of contemporary and secondary sources reveals the myriad ways the park was used by city-dwellers from the Dutch colonial period to the present-day, mirroring the municipal issues that the City of New York (which will henceforth be referred to by its common name: New York City) has had to confront throughout its long history and with which urban areas must deal with to this day.\(^1\) In less than 200 years, City Hall Park -- first established in the Dutch tradition of common lands – has developed into the seat of New York City municipal authority.

This dissertation neither attempts nor intends to recount a complete detailed history of City Hall Park, nor does it attempt to present a comprehensive theoretical analysis of the archaeological remains recovered throughout the property. Instead, this dissertation seeks to develop and utilize a methodological approach to compile and reconcile the history of the property and the various independent archaeological projects that have occurred since 1980. The result will provide a framework and context for future analytical interpretations and future excavations at City Hall Park.

\(^1\) The most recent documentation being Bankoff and Loorya’s 2008 report detailing the 1998–1999 excavations at City Hall Park, which included *City Hall Park: An Historical Analysis* by Mark Cline Lucey, 2004 master’s thesis on file at Brooklyn College, Department of History.
Archaeological projects in City Hall Park since the early 1980s, most undertaken as Cultural Resource Management (CRM) endeavors, have used disparate methods and levels of excavation and recording during fieldwork. Significant portions of the larger City Hall Park assemblage lack adequate field documentation and no unified archaeological map exists, limiting analysis and the ability of researchers to assess the formation and interpretation of City Hall Park. Exacerbating the problem is the complexity of the site itself; nearly 500,000 material remains and over 100 features have been recovered in the Park. The creation of a new analytical and interpretative methodology that reconciles various streams of archaeological data, combined with the creation of an overall site map detailing all known building and feature remains, is necessary for any ongoing and future work at City Hall Park. One of the fundamental goals of this dissertation is the creation of a

Map 1.01: City Hall Park (NYC GIS).
comprehensive archaeological and historic features map of City Hall Park, called the City Hall Archaeological Resources Map (CHARM).

The process of creating the unified map serves the dual purpose of developing a system by which to physically and contextually define the complex historical and archaeological characteristics of the property during the eighteenth and nineteenth centuries. The end result can ultimately serve as a base tool for a contextual materials analysis and guide for future excavation and interpretation work. In addition to the creation of the CHARM, a basic analytical summary of the work done on the overall site will establish the context for future in-depth analyses. Further, a basic analytical assessment of specific architectural and trash deposition features from excavations that occurred in 1998-1999 and 2010-2013 will also be presented in association with the historical context.

**CONTEXT**

The European period, or post-contact history, of City Hall Park can be divided into three distinct phases: common lands, institutional, and municipal. The initial phase occurred during the seventeenth century when the land that would become known as City Hall Park was used as common lands following the Dutch tradition by the first European inhabitants of the property. During this period, the Common was mainly used for its natural resources. The open nature of the Common and its location outside the limits of New Amsterdam led to a shift toward institutional use in the early 1700s.
The second phase, institutional, is marked by the construction of the Almshouse and two prisons: the Gaol and the Bridewell. These institutions were designed to house New York City’s poor, vagrants, and criminals in an attempt to solve some of the social ills plaguing urban society.

The third phase, municipal, occurred after the Revolutionary War when New York City’s rapid economic and population growth altered the physical landscape of Manhattan and challenged ideas concerning the role of public spaces in urban environments. During this phase, City Hall Park was used to house the executive and legislative branches of the City’s government instead of its corrective institutions, typified by the construction of City Hall between 1803 to 1811. By 1838, City Hall Park had settled into its current role as the seat of municipal government for New York City. The land surrounding City Hall was transformed into a public park, blending historical traditions with modern use. Importantly, its role as a public park and civic center ultimately ensured that aspects of the park’s history would be preserved archaeologically.

Today, City Hall Park, a landmarked site, is designated as part of the African Burial Ground and the Commons Historic District and remains one of the oldest public spaces in New York City and the United States.

Though several archaeological projects and historic studies have occurred within City Hall Park, there has been little written or published. There have been no architectural or landscape studies. All of the archaeological projects were undertaken as part of CRM regulations and produced associated technical reports. The two largest archaeological projects, undertaken in 1999 and 2010,
both faced time, funding, and spatial limitations. In 1999, time restrictions resulting in the partial recovery of some features and deposits, as well as insufficient recording, impacted analysis. Due to project boundary and funding constraints, full recovery of some features and deposits was not permitted in 2010.

Work within City Hall Park has produced one of New York City’s largest “raw data” archaeological assemblages. The work from 1999 and 2010 recovered close to half of a million artifacts, including faunal and skeletal remains, that document the eighteenth, nineteenth and early-twentieth century occupations of City Hall Park.

City Hall Park’s long history, dense occupation, and variety of institutional and municipal activities suggest several theoretical research possibilities. Based upon the known history of City Hall Park and the number of primary context features, a multi-faceted historical archaeological study of the property and its inhabitants during the period of occupation should be feasible.

Historical research identifies the period from 1736 to 1811 as the most active and densely populated period in City Hall Park’s history. This period correlates most directly with the park’s institutional phase, though it does catch the beginnings of the shift towards legislative use (i.e. the seat of government) following the construction and opening of City Hall in 1811/1812.

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2 Note that throughout this dissertation the term “1999” refers to CRM excavations that occurred between 1998-1999 by Parsons Engineering Science and “2010” refers to CRM excavations that occurred between 2010 and 2013 by Chrysalis Archaeological Consultants and URS.
The land of City Hall Park, colloquially known as “the Common” or “The Fields” during the early historic period, served as public space for more than three centuries. During the early years of European settlement, the area was used for its natural resources, as pasture for livestock, and a source of clay for local potters. People used the land for parades, rallies, celebrations and demonstrations (protests). In the eighteenth century, the Common began to be used for institutional purposes as a place to house the “marginal aspects of society” such as the poor, the homeless, and prisoners. During this period, it was also used for military housing for British soldiers. In the nineteenth century, the lands were chosen as the site of the new City Hall and became known as ‘City Hall Park’. From this time forward it has been used for civic purposes. The area became a hub for government offices and part of the property was retained as a public park, even as the City expanded.

Much may be made of the use of the Common for institutional purposes. The area was at the northern edge of the City during the mid- to late-eighteenth century and lay adjacent to the swampy Collect Pond district, an industrial area. The Common provided an ideal area to house the marginal aspects of society outside of the everyday view of polite society, while enabling city residents to meet their Christian obligations of charity.
However, even within the Common and its institutions there were social and/or cultural separations. As noted in the Minutes of the Common Council (MCC) the residents of the Almshouse were viewed quite differently, and with greater sympathy, than the prison inmates. Concern was expressed that over-crowding of the prisons would expose Almshouse residents to the prisoners (MCC 1675 - 1776). Another distinctive social group among persons occupying the Common was that of the British military. Once Fort George, located at the southern tip of Manhattan Island, was at (or above) capacity, several barracks were constructed within the Common to house soldiers sent to maintain order both before and during the Revolutionary period. These soldiers were not welcome guests. Locating them at the Common may have been partially due to some practicality of space constraints within the growing city. However, city residents had voiced their opposition to soldiers being billeted in their homes. Unlike inmates of the Almshouse and prisons, the British soldiers likely had greater freedoms and were of a different status than the ill-begotten poor, debtors, and derelicts.

The physical, social, spatial, and ideological separation of space within the confines of City Hall Park may be apparent through a historic map analysis of the property’s known structures, archaeologically recovered remnant architectural features, and to some degree the trash deposit features. The spatial distribution of features may define areas associated with specific institutions/populations or show a potential overlap that may indicate the interaction of the different populations.

---

3 The Minutes of the Common Council are the records of New York City’s governing body. Records were distributed periodically through publication in book form. These documents have been edited and redistributed several times since the eighteenth century. For ease in this document, the records will be abbreviated as MCC.
None of the previous archaeological projects has been compiled into a single source map, or report, depicting historically known structures comparative to archaeological features. A single source archaeological resources map defining location and sequence of deposition or formation will allow consideration of the Common as cultural space, using archaeological interpretive resources.

Several large artifact deposits were found in 1999, but their interpretation was limited by minimal field documentation -- specifically stratigraphic information -- and a lack of a broad based understanding of the historic configuration relative to the complex site formation in this densely occupied urban property. For example, the most recent excavation work in 2010 highlighted the invalidity of ascribing the identification of a deposit based upon the nearest historic structure or the significant presence of a specific artifact type, particularly when the deposit was located in an open area accessible to multiple persons from various populations. The generally accepted Post-Processional theoretical questions that differentiate areas between social/economic classes may not be possible at City Hall Park. What would it mean for the interpretation of the materials remains from clearly different social and economic classes within CHP if the site formation processes do not allow for clear distinctions between them? City Hall Park is a site in which commonly held historic or archaeological assumptions do not apply. The dense urban occupation suggests deposits may belong to multiple groups as opposed to a specific group. Additionally, frequent, large-scale demolition and new construction activities at the site not only buried or eradicated significant remnants of the eighteenth century landscape, it also modified and incorporated them. Rectifying disturbance and delineating between populations is essential if any meaningful analytical material studies of specific groups are to occur. This study explores the possibility of such delineation.
There are many analytical tools that may be used to differentiate between the groups within City Hall Park. Once such major aspect to be considered is sanitation practices, especially with regard to determining population distinctions between trash deposit features and the composition of the site as a whole. "Garbage is among humanity's most prodigious physical legacies (Rathje 2001:4) … the creation of garbage is an unequivocal sign of a human presence" (Rathje 2001:10). In the eighteenth century, refuse disposal was not conducted by the municipality and, instead, individuals were responsible for their own trash. Refuse deposits were located in and around the area of the Collect Pond and the East River and, perhaps, what would become known as City Hall Park. Before further research can be considered, the question of ‘who took out the trash’ and what they did with it must be addressed. In essence, how the deposits at City Hall Park were created.

It is accepted sociologically that human beings seek, or prefer, the path of least resistance; the easiest means offered to complete everyday tasks and chores. "The history of garbage consists largely of a relatively few long, simple and durable strands of behavior" (Rathje 2001:32). Throughout time, humans generally disposed of their trash via the most convenient mean: where it fell. Adequate for when humans were migratory, these convenient practices rapidly became a problem once sedentism became the norm. The excavation of the barracks at Fort Edwards at Rogers Island provides an archaeological example of the negative aspects of expedient trash disposal, the analysis of which led researchers to state that “these British Regulars had practically wallowed in their own trash, not bothering to take their garbage outside the building” (Starbuck 1993:33).
General human behavior with regard to refuse disposal would influence how eighteenth century New Yorkers sought to deal with their own waste. Throughout history, human groups have employed four basic methods of disposal either individually or in tandem: dumping, burning, recycling, or the minimalizing of waste (i.e. future garbage) (Rathje 2001). Within New York City, the densely populated urban setting influences these choices and behaviors. Several CRM and academic projects have demonstrated the use of privies, wells, or other shaft features for refuse disposal, as well as documenting sheet deposits containing refuse. It has been generally shown within historical archaeology that persons in eighteenth and nineteenth century New York, and other urban areas, disposed of their refuse in their rear yards in this manner (for example see Geismar 1983). However, this neat and convenient assumption generally negates the constraints of space and the accumulation of ten or twenty or more years’ worth of refuse. Eighteenth and nineteenth century yards were small. It appears that residents filled non-functioning privies and wells with household debris. However, it is highly unlikely based upon documented references and sheer plausibility that they did so continually for decades. There was no regular garbage pickup or sanitation department as we understand it today. While it was possible to have a privy cleaned, there is no documentary evidence to support the regularity or frequency of such measures prior to the 1830s (Geismar 1993). It was possible to hire cartmen to remove trash, but it is generally thought to have been a practice employed by wealthier residents. The widespread availability of cartmen services is not documented. Instead, there are repeated references to the problem of refuse in the streets and the need for ordinances to regulate refuse disposal (MCC 1675 – 1776: various entries).
City government proposed laws and imposed fines in an attempt to manage the large amounts of the City’s refuse, all of which factor into the formation of the Common’s trash deposits. As early as 1648, the MCC was discussing the problem of waste in the City (Burrows and Wallace 1999:43). Several ordinances were passed detailing how residents should deal with their trash. There are also mentions of illegal dumping at the Common (MCC 1675 – 1776: various entries). It has been stated that there was a gap between practice and prescription with regard to the City’s cleanliness laws (Burrows and Wallace 1999). Understanding the depositional history and composition at the Commons is paramount to any interpretation of City Hall Park.

Throughout human history, dumping has been the favored means of disposal. "A human being’s first inclination is always to dump" (Rathje 2001:34). It may be this basic human characteristic, coupled with increasing crowding due to population growth, that lays behind the repeated references to the problem of garbage in the City’s streets. One ordinance implored people to bring their trash to the East River for disposal (New York Weekly Journal, 15 May 1738, 235:1). The failure of people to do so led to a ban and fines for dumping in the Common and in the Collect Pond. However, there was "a conspicuous gap between prescription and practice" as accumulations of garbage and offal "continued to frustrate municipal authorities" (Burrows and Wallace 1999:46). How does this affect an analysis of trash deposits from City Hall Park? Repeated, and regular, dumping from off-site sources could contaminate the sample and make population distinctions even more difficult.
Suppose the ordinance banning dumping on the Common was fairly or somewhat successful: the question then arises, how did the various residents of this relatively small parcel of land, manage their waste disposal?

There are several hypotheses as to how refuse was managed during this period of study. To date, no definitive documentary evidence on this subject has been found. Possibilities suggested are that: 1) each structure made its own arrangements with regard to refuse disposal; 2) communal dumping may have occurred (i.e. all structures used a common disposal area) and; 3) communal dumping occurred as well as a degree of off-site dumping.

The variety of garbage disposal practices has the greatest impact on the analysis of the trash deposit features from City Hall Park. A comprehensive map of archaeological features and deposits, matched with their contemporaneous historic structures, is key to being able to begin any theoretical analysis of the site. The comprehensive map is provided herein.

RECONSTRUCTION VIA DE-CONSTRUCTION

City Hall Park bears silent witness to the institutional and municipal use of this public parcel of land as a repository for the unwanted. Any analysis of the larger City Hall Park assemblage from 1980 to 2013 needs to use a historical context to define and classify the trash and architectural features in an attempt to assign depositional materials and actions to specific groups or sociocultural behaviors. However, the concentrated occupation and development of City Hall Park has created a dense and muddled archaeological record. Defining and associating features and
material deposits requires deconstructing, and then reconstructing, the property known as City Hall Park.

Before looking at the microcosm of specific groups that have occupied City Hall Park, there needs to be an understanding of the landscape. The cultural landscape can be seen as a form of self-representation: how people creating the worlds they live in also produces a visible representation of beliefs and values (Domosh 1998). “The relationship between landscape and the people who inhabit or create that landscape is one of context and text” (Domosh 1998:4). Understanding a cultural and historical context requires understanding the landscape in which it was embedded and vice versa. One begets the other.

In the instance of City Hall Park, its history of dense urban occupation by multiple groups has created a complex and integrated archaeological landscape, followed by its physical reshaping. City Hall Park is a construct, and disseminating its complexities, or the interwoven features and deposits, is the integral first step to a further cultural and archaeological analysis of the property and its inhabitants.

It is not possible to look to the detail of cultural expression, to the analysis of groups, without first establishing the cultural and physical landscape into which the archaeological record was laid and modified over time. As part of this dissertation, a deconstruction of the archaeological record and historic landscape in order to design a framework in which to begin a historical archaeological analysis of the groups that occupied City Hall Park is presented. It is a methodological undertaking that lays out a baseline for future analysis.
In doing so, this dissertation is influenced by the cross-sectional approach of urban historical geography, adapting it to the specific needs of archaeology within City Hall Park. The cross-sectional approach is a method that provides consecutive pictures of a landscape at regular intervals to clarify historical data concerning key elements of the landscape. It uses various tools and informational resources to explain social structure and to interpret the landscape at several levels. Doing so places the study area within the particular socio-cultural world it inhabited and the general cultural and economic situation that shaped it.

Adapting the cross-sectional approach to the history and archaeology of City Hall Park will create temporal benchmarks, or snapshots of the configuration of City Hall Park at specific periods in time, during the eighteenth and nineteenth centuries. The methodological approach to undertake this study begins with the official 2013 City Hall Park map produced by the City of New York – Department of Design and Construction (DDC) as the base map. Previous archaeological undertakings and information derived from additional documentation and research were then added to the base map. The method then uses archaeological and historic research to work backward to deconstruct the landscape. Historic structures will be located on the base map in addition to contemporaneous archaeological features and deposits.

The development (reconstruction) of the CHARM results in a contextual assessment and identification of over 200 archaeological features. Layers of the CHARM are utilized and presented throughout this study.
The presentation of information in this dissertation follows a logical order: an overview of the various archaeological projects within City Hall Park that led to the overarching need for the creation of CHARM; the deconstruction of City Hall Park; discussions on the Park’s changing landscape in the seventeenth, eighteenth and nineteenth centuries as seen through CHARM; and specific archaeological features and material remains. Lastly, a summation of what this baseline reconstruction of the various City Hall Park excavation projects can mean for future research will be addressed.

4 The discussion of the archaeological features incorporates artifact analysis from the 2010 project conducted by Chrysalis Archaeology and URS Corporation. I served as the Principal Investigator and primary author of the associated report, which is referenced herein.
II: URBAN ARCHAEOLOGY AND CITY HALL PARK

The development of modern historical archaeology has enriched our understanding of the history of the United States, including one of its largest cities: New York City. Archaeological studies have prompted scholars to reconsider their assumptions about the lives of past residents and the development of the city itself. Chapter II outlines previous archaeological projects undertaken within City Hall Park to place this dissertation within the context and general framework of the archaeological history of New York City.

Over the past several decades, archaeological projects in New York City have explored post-European contact, post-colonial culture, and urban development under the rubric of historical archaeological theory. These studies have looked at the evolution of culture, population growth and diversity, consumerism, landscape, identity, class, and many other issues relative to the colonial and post-colonial periods.

In large part, these topics are able to be explored because historical archaeology utilizes a multidisciplinary approach that incorporates a multitude of methodologies, theoretical orientations, and disciplines, like archaeology, anthropology, and history, to explore socio-cultural and historical issues. When studying the historic period, it is not sufficient to excavate and draw conclusions solely from materials analysis when there are a plethora of books and primary source documents containing data and information. Nor is it valid to only ask “the questions that count,” which has been the pre-dominant Post-Processual approach to historical archaeological study in the United States. Historical archaeology is multi-faceted, incorporating documentary data and
archaeological analysis into a cohesive interpretation. The process itself is equally important as the questions that are asked.

The field of historical archaeology has, since the turn of the twenty-first century, expanded its interdisciplinary nature to include information and resources from other academic disciplines, such as geography and sociology. Within the current paradigm, field archaeology, like history, may now be perceived as a tool of historical archaeological studies as excavation and materials analysis becomes simply one component of a broad-based examination (Deetz 1993 and Carr 2000). Today, many studies regularly enlist geographical techniques to aid in the formulation of non-intrusive alternatives to excavation (e.g. remote sensing) and to assist in analysis (e.g. GIS and ground penetrating radar). The sources and methods at our disposal are manifold.

Within the United States, archaeological studies have expanded beyond academia and into the private sector, partly as a result of the National Historic Preservation Act of 1966 (NHPA), as amended, which recognized that the history of the United States was deserving of protection and preservation¹ (Fowler 1991).

Significantly, and as a result of the NHPA, the majority of archaeology in the United States occurs as Cultural Resource Management (CRM). CRM as a practice is guided by preservation laws from all levels of government that seek, in part, to mitigate the potential negative effects of development on cultural resources. Various local, state, and federal laws require archaeological or cultural

¹ Some of the major acts of Congress include: The Antiquities Act of 1906; The Archaeological Resource Protection Act; The Abandoned Shipwrecks Act; The Native American Graves Protection and Repatriation Act; The National Historic Preservation Act; and The National Environmental Policy Act. For more information see King 1998.
resource studies prior to development or re-development on projects that utilize municipal funds or occur in known historic or culturally sensitive areas. If local, state, or federal funds are being used, developers are required, as per the law, to undertake one or all of the various phases of the cultural resource review process at their own expense. These include historic documentary and archaeological sensitivity assessments and may expand to field testing or full-scale excavation. Most of the new data for scholarly historical archaeology studies comes from CRM projects.

Historical archaeology and CRM are integrally linked within New York City. Due to the urban nature and highly-developed environment of the city, almost all archaeology occurs as part of the CRM process. Though CRM is a professional endeavor and rarely allows for research-focused interpretation, its reports have nevertheless provided New York City archaeologists with much of the data used in academically-oriented studies. Increasingly, regulatory agencies have been asking or requiring larger CRM projects to identify and, to a lesser degree, investigate, research questions. While this is worthwhile, projects subject to municipal funding are not always given adequate resources or time for such in-depth analysis and study. City Hall Park, and other New York City sites, have become victims of these limitations.

Further, CRM studies are bound by, or limited to, the construction footprint. Even if significant resources are identified, the archaeologist may not be permitted to expand excavation boundaries or afforded the time to fully recover or document a discovery if they lay beyond the boundaries of the construction zone. In New York City, the regulatory agent often requests that a project be re-designed to avoid impacting the archaeological resource. If a re-design occurs, the archaeological resource field investigation of that resource is halted, leaving information gaps or incomplete data.
recovery. These factors must be taken into consideration when construction-based CRM projects are used for academic studies. Nowhere in New York City is this more evident than at City Hall Park where several major features were only partially documented.

THE ARCHAEOLOGY OF NEW YORK CITY

By its nature, an archaeological study of New York City involves the study of a city, of urban life, and urban development. Renfrew describes cities as being a place with “a large population center (around 5,000 or more inhabitants) with major public buildings, including temples and work places for the administrative bureaucracy” (Refrew and Bahn 1991:157). The archaeological study of cities has commonly been termed “urban archaeology.”

Cities are a major component of modern life and understanding their development is of great importance to scholars. Yet the nature of urban work presents many drawbacks to archaeologists. The constant building and re-building of structures destroys much of the original provenience (Schuyler 1978:5). The archaeology of cities has been called “salvage archaeology,” where the main goal is to get the, datable “good pieces” out before the sites are destroyed (Refrew and Bahn 1991:39). In 1968, Fairbanks noted that the same people who are destroying the sites are the ones who contract the archaeological work and are paying the bill. It was his assessment that, as a result of this conflict of interests, the urban archaeologist generally does not have the permissions and time necessary to do a proper job of recovery (Fairbanks 1968:16). Unfortunately, that statement still remains a reality in many instances.

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2 Note that this section is not intended to be a full history of CRM archaeology within New York City. Rather it presents only highlights of the major excavation work in lower Manhattan.
Limited time and funding has impacted the scope and flavor of CRM reports, often necessitating a more technical approach. The majority of late twentieth century urban archaeological studies, particularly in New York City, focused on single sites, dealt with short term goals, and did not incorporate comparative analysis or place subjects or results into the context of the larger city (Cressey 1978:204-207).

New York City is one of the oldest major cities in the United States. It is also, both presently and historically, one of the largest and most densely populated in the country. Since the turn of the twentieth century, the New York City area has been the subject of numerous archaeological investigations; the earliest of which were done by avocational archaeologists. During the first half of the twentieth century, most excavations focused on Native American sites.³ Little of what is called “urban archaeology” was conducted.

According to Dr. Edward Staski, it was not until the 1970s that the practice of urban archaeology began in earnest, in part due to changes in theoretical perspectives and laws (Staski 1987:ix). Staski observed that, until this point in time, researchers did not consider the types of sites recoverable in urban environments to be significant enough to warrant the extraordinary means required to undertake excavations. However, “in many ways, modern, living cities are the perfect laboratories for archaeologists to learn about the deep legacy of the American past. Cities, after all have played an increasingly important role in American life since the first European settlements” (Cantwell and Wall 2001:7).

Dr. Bert Salwen stated in the early 1970s that it was time archaeologists started doing “archaeology of the city and not archaeology in the city” (Salwen 1973:152). This new doctrine was primarily concerned with the history of the development of urban centers from the standpoint of the European people who created them. Salwen believed that when it came to work within urban settings, research should be focused on how and why cities developed, going beyond mere description (Salwen 1973).

Like the majority of archaeology in the United States, work in New York City has been conducted within the confines of Cultural Resource Management. Few excavations have been conducted solely for academic research purposes. Some notable research focused projects include Rose Hill in Fordham by Allan Gilbert and Robert Schuyler and William Askin’s work at Sandy Ground on Staten Island.

Some of Manhattan Island’s four major excavations have occurred at South Street Seaport (Rockman, Harris and Levin 1983; Chrysalis Archaeology 2017); Hanover Square (Rothschild and Pickman 1990); the Stadt Huys Block (Rothschild, Wall and Boesch 1987); City Hall Park (Baugher and Lenik 1997, Parsons 1999, Bankoff and Loorya 2008, and Chrysalis Archaeology and URS 2013); Five Points (John Milner and Associates 2000); the African Burial Ground (Perry, Howson and Bianco 2009); and South Ferry (AKRF, URS and Stone 2012).

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4 Generally when academics or other persons speak of “New York City” it is often a reference to Manhattan Island. The four outer boroughs are generally not considered part of, or with regard to the historical importance or development of New York City until they were formally incorporated in 1898.
Demonstrating the value of historical archaeological studies, these excavations provided new information about historic New York City and its residents. Not until the 175 Water Street project at South Street Seaport did we understand the detail and composition of historic landfill techniques, including the practice of filling old ships with garbage and sinking them (Geismar 1983). Nor was it commonly known that the original City Hall lay adjacent to a tavern (Rockman and Rothschild 1984; Rothschild, Wall and Boesch 1987). Knowledge unlocked by archaeological investigation presents researchers with different outlooks concerning the interactions between, and values of, past societal groups and/or classes within the city. For example, the Five Points and African Burial Ground projects have led to numerous insights regarding class, ethnicity, and the social and economic status of immigrant and enslaved populations throughout time (John Milner and Associates 2000 and Perry, Howson and Bianco 2009). Excavations in Greenwich Village led Dr. Diana diZerega Wall to her landmark study of gender in nineteenth century Manhattan (Wall 1994). Recent work in the South Street Seaport has shed light on the city’s first public water system, utilizing dendrochronology to create a refined timeline of the landfilling and construction of the area (Chrysalis Archaeology 2017).

Throughout its history, the population of New York has experienced near continual growth and has always been extremely diverse. Documentary records compile many facts about the city’s past but contain very little about the details of everyday life for the majority of New York City’s residents.

Archaeologists can do much to re-create it [daily life] by studying the artifacts they find in an old back yard or on an old basement floor. Then they can turn to historical records to identify the people who lived or worked on the archaeological site at the time the artifacts were deposited in the ground. Combining the information from the artifacts and the written records, they can construct a micro-history providing a
glimpse into the everyday life of a particular home or workplace at a particular moment in time (Cantwell and Wall 2001:169).

New York City archaeologists have studied: foodways, or the range of activities necessary or employed to obtain, prepare and consume food (Pipes 2013); the complex transition from Dutch to English rule during the colonial period; the fate of Dutch culture in a newly English colony; and American consumer and social behavior (i.e. lifeways). The South Street Seaport Archaeology report by Chrysalis Archaeology looks at consumer materials associated with a newly formed American identity (Chrysalis Archaeology 2017).

Archaeology has brought to light a great deal of information about New York City’s early Dutch history and heritage. Even though New Amsterdam became an English colony in 1664, Dutch culture and heritage survived in individual households within the city throughout the eighteenth century and can even be seen today in the outer boroughs. In fact, differences in ethnicity largely defined where eighteenth century New Yorkers lived and worked within the city.

The eighteenth century city was more geographically compact than today’s and was confined to what is now known as lower Manhattan with the Common, or present-day City Hall Park, forming the northern boundary. During the eighteenth century, people often worked and lived within the same structure and business owners commonly provided accommodations for their employees and enslaved persons. Archaeologists Dr. Nan Rothschild and Dr. Diana DiZerega Wall have looked at cultural interactions between populations in New York City by examining changing uses of space over time, believing that “the urban landscape structures the social relations of the people who lived in the city” (Cantwell and Wall 2001:191).
Rothschild’s eighteenth century neighborhood study revealed that New York contained distinct ethnic neighborhoods, challenging the contemporary conception of the city as being integrated and heterogeneous. Non-Dutch or English-descended residents continued to sequester themselves into ethnic enclaves well into the nineteenth century, even as major shifts in the use of space occurred throughout the city. Wall would expand upon these themes in her works concerning gender and the separation of work and home (Wall 1994)

THE ARCHAEOLOGY OF CITY HALL PARK

Historically, City Hall Park was a heavily utilized and densely occupied site within the city, making its archaeological potential obvious. Cultural Resource Management projects have been responsible for all archaeological work undertaken in City Hall Park, of which Table 2.01 provides a list.

Table 2.01: Previous archaeological site reports for City Hall Park and vicinity.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>SITE NAME</th>
<th>AUTHOR</th>
<th>REPORT TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>City Hall Park</td>
<td>NYC LPC</td>
<td>The Archaeological Investigation of the City Hall Park Site, Manhattan</td>
</tr>
</tbody>
</table>

5 For a complete/detailed history of previous archaeological efforts within City Hall Park please see the reports by Bankoff and Loorya (2008) and Chrysalis Archaeology and URS (2013).
<table>
<thead>
<tr>
<th>YEAR</th>
<th>SITE NAME</th>
<th>AUTHOR</th>
<th>REPORT TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>City Hall Park</td>
<td>Redding, Ferreira, Morgan &amp; Ridge</td>
<td>City Hall Park/2 Archaeological Site Report - The J.C. Decaux Public Lavatory Pilot Installation Project in NYC's City Hall Park</td>
</tr>
<tr>
<td>1995</td>
<td>City Hall Park</td>
<td>Hunter Research, Inc.</td>
<td>Archaeological Investigations in City Hall Park Electrical Conduit Trench Tweed Courthouse to Broadway</td>
</tr>
<tr>
<td>2000</td>
<td>African Burial Ground</td>
<td>KSK Associates</td>
<td>Biorachaeological Monitoring of Water Main Repairs and Identification of Associated Human Skeletal Remains, Chambers Street Between Broadway and Centre Street, Lower Manhattan, New York City</td>
</tr>
<tr>
<td>2003</td>
<td>Tweed Courthouse</td>
<td>Hartgen Archaeological Associates</td>
<td>Tweed Courthouse Archeological Survey and Data Retrieval Investigations</td>
</tr>
<tr>
<td>2004</td>
<td>City Hall Park</td>
<td>Marilyn R. London</td>
<td>Analysis of Partial, Scattered, and Incomplete Human Skeletal Remains Recovered during the 1999 Renovation of the Park</td>
</tr>
<tr>
<td>2008</td>
<td>City Hall Park</td>
<td>Bankoff &amp; Loorya</td>
<td>The History and Archaeology of City Hall Park</td>
</tr>
<tr>
<td>2013</td>
<td>City Hall Park</td>
<td>Chrysalis Archaeology and URS</td>
<td>City Hall Rehabilitation Archaeology Project 2010 – 2011 [4 Volumes]</td>
</tr>
<tr>
<td>2013</td>
<td>City Hall Park</td>
<td>Chrysalis Archaeology</td>
<td>Fuel Cell Installation Project- City Hall Park, Manhattan, New York Phase 1B Archaeological Monitoring Project</td>
</tr>
</tbody>
</table>
Grossman and Associates undertook the earliest known archaeological work within City Hall Park, conducting an archaeological assessment for the proposed subterranean utility corridor between City Hall and Tweed Courthouse.

The next project was undertaken by the City of New York – Landmarks Preservation Commission (LPC) and Brooklyn College, CUNY, in 1989. Then LPC archaeologist Dr. Sherene Baugher, along with Drs. H. Arthur Bankoff and Frederick A. Winter of Brooklyn College, CUNY, conducted fieldwork prior to the construction of the utility tunnel between City Hall and Tweed Courthouse. The archaeological project focused on the exploration of a foundation wall discovered during earlier excavation work (Baugher 2001; Bankoff 2007). Over the course of the three-week project, several discrete contexts were recovered that Baugher determined to be related to the first Almshouse. Baugher believed the wall to be part of the Almshouse complex and the excavated materials to be associated with the Almshouse inhabitants. Analysis of the materials revealed information about the daily activities of Almshouse residents, particularly with regard to sewing and button-making activities.

In a 2001 article, Baugher used the analysis to explore the perceptions of, and responses to, the poor in eighteenth-century New York City by its better-off residents. It is her assertion that the Almshouse and its setting demonstrated a popular concern for the welfare of the poor (Baugher 2001).

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6 Excavations were conducted as part of the Brooklyn College Summer Archaeological Field School.
Excavation work north of Tweed Courthouse along Chambers Street in 1994 recovered over 4,000 artifacts, including human remains. Though not technically within City Hall Park itself, this area was historically part of the Common (Hunter 1994).

As a result of this work and the creation of the African Burial Ground and Commons Historic District, Hunter Research was engaged to conduct an extensive map and site history of City Hall Park. The goal of this study was to identify the location and extent of historic structures within the property using documentary resources. The resulting report included several composite maps that show the proposed configuration of City Hall Park during different time periods. Additionally, it contained an inventory of structures that once stood on the property. This inventory included physical descriptions and measurements, when available (Hunter 1995). Table 2.02 contains a partial inventory of the main structures within City Hall Park and their date of construction.

<table>
<thead>
<tr>
<th>YEAR OF CONSTRUCTION</th>
<th>STRUCTURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1663-64 and 1692-95</td>
<td>Windmills</td>
</tr>
<tr>
<td>1720-30</td>
<td>John Harris House</td>
</tr>
<tr>
<td>1735</td>
<td>First Almshouse</td>
</tr>
<tr>
<td>1745</td>
<td>Palisade</td>
</tr>
<tr>
<td>1747</td>
<td>Powder Magazine</td>
</tr>
<tr>
<td>1757-59</td>
<td>Gaol</td>
</tr>
<tr>
<td>1757</td>
<td>Upper Barracks</td>
</tr>
<tr>
<td>1774</td>
<td>Second Barracks</td>
</tr>
<tr>
<td>1782</td>
<td>Barracks</td>
</tr>
<tr>
<td>1775</td>
<td>Bridewell</td>
</tr>
<tr>
<td>1784</td>
<td>City Gallows</td>
</tr>
<tr>
<td>1797</td>
<td>Second Almshouse</td>
</tr>
<tr>
<td>1803-1811</td>
<td>City Hall</td>
</tr>
<tr>
<td>1818</td>
<td>Rotunda</td>
</tr>
<tr>
<td>1861</td>
<td>Tweed Courthouse</td>
</tr>
</tbody>
</table>
The Hunter report represents a heavily used and densely populated area. Several structures, known to house large numbers of people, occupied the property simultaneously. Most prominent of these structures were the first Almshouse, the Gaol\textsuperscript{7}, the Bridewell, and a series of military barracks (Image 2.01). While there is some mention of fences that possibly delineated portions of the property, there was no determinative evidence of this either archaeologically or in primary documentary sources (Hunter 1993).

\textsuperscript{7} “Gaol” is the British spelling for jail.

Image 2.01: Composite map depicting the period of 1776–1796 (Hunter 1993).

The composite maps developed by Hunter were tested for precision and accuracy when renovation and infrastructural upgrades requiring a significant amount of subsurface disturbance were planned for City Hall Park. From December 1998 through August 1999, Parsons Engineering Science
(Parsons) conducted excavations on behalf of the City of New York – Department of Parks and Recreation (Parks).

Parsons produced an initial archaeological sensitivity study of City Hall Park prior to the commencement of fieldwork (Parsons 1998-2000). In their assessment, Parsons referenced historic maps and previous cultural resource reports, including the Hunter study, to determine areas of high archaeological potential. Per Parsons archaeological sensitivity study:

Those areas that the study slated for monitoring were thought to be disturbed by previous earthmoving activities, or covered by modern fill to the depth of the construction impact. If it was not clear whether or not an area had been disturbed or covered by fill, the sensitivity report proposed archaeological sampling or testing. In areas thought to contain potentially intact archaeological resources, the study recommended complete manual excavation by archaeologists (Parsons 1998-2000).

In accordance with CRM procedure, the construction schedule guided excavation. Wherever construction activities were to impact the subsurface, archaeologists were required to monitor, sample, test, and/or excavate to ensure the preservation of any buried cultural resources. A majority of the excavation was conducted via backhoe trenching; manual excavation methods were employed as needed. Only upon the appearance of a significant archaeological deposit, defined as a dense artifact layer or architectural feature, was mechanical excavation halted, allowing the Parsons field crew to manually excavate these areas.

All archaeological work was limited to excavating within the footprint slated for construction. Parsons’ contract agreement with Parks did not allow for changes in the schedule due to
unexpected finds. Monitoring, testing, and excavation plans were determined before the actual excavation (Parsons 1998–2000).

Parsons’ analysis divided City Hall Park into two halves, with the parking lot in front of City Hall serving as the mid-point of the property. The southern half of the park, which is open to the public, was determined to have little archaeological sensitivity because it was believed to have been heavily disturbed by: the construction of the United States Post Office, which stood at the southern tip of the park (1870–1938); the 1938 reconstruction undertaken by the Robert Moses NYC Parks administration; and the construction of the Delacorte Fountain in the late 1970s. Parsons monitored excavation in the southern end of the park and reported that no significant resources were exposed (Parsons 1998–2000).

The sensitivity study determined that the northern portion of the park was significantly less disturbed and therefore deemed to have a high degree of archaeological sensitivity. The study concluded that despite some twentieth-century modifications, the northern portion of the park retained its general late-nineteenth-century configuration and archaeological resources were likely preserved beneath several areas of fill (Parsons 1998–2000).

During the 32 weeks of excavation, Parsons uncovered several refuse deposits of varying sizes and shapes, architectural features, and human interments. Anthropologists from the Smithsonian Institution in Washington, D.C. undertook and reported on the analysis of the human remains (London 2004).
As construction requirements dictated the footprint of the archaeological excavation, in the event that features were discovered, they were not always fully excavated. However, according to Parsons’ field notes, every effort was made to do so. In several instances, a representative sample was taken or a random sampling strategy was employed. Excavation units and features were excavated in arbitrary 6” levels or according to the natural stratigraphy (Parsons 1998–2000).

Based on their preliminary analysis in the field and the locational context of the uncovered features, Parsons made a series of associations between historic structures and archaeological features. In total, over 2,000 individual units were excavated (either mechanically or manually) during the 1998–1999 project and over 250,000 artifacts, including faunal remains, were recovered.

Due to various factors, Parsons did not undertake the laboratory analysis of the excavated materials or produce a report for this project. New York City took possession of the material remains, storing them until funding became available and an agreement was reached with CUNY to undertake the analysis.

A utility project along Chambers Street, adjacent to the Tweed Courthouse, recovered several thousand artifacts, as well as human remains, in 2000 (Hartgen Archaeological Associates 2003). The materials were from largely disturbed contexts, demonstrating both the significant amount of disturbance that has occurred in the area due to construction work and the density of cultural materials still lying beneath the surface (Hartgen Archaeological Associates 2003).
In 2001, with the support of LPC, Parks contracted with the City University of New York (CUNY) to undertake the analysis of the material remains Parsons had recovered in 1998–1999. The proposal included a consortium of professors: Dr. H. Arthur Bankoff (Brooklyn College) and Dr. Thomas McGovern (Hunter College) were co-directors, and Dr. Sophia Perdikaris (Brooklyn College) and Dr. Neil Smith (The Graduate School and University Center) were named assistant directors of the project. Alyssa Loorya M.A. was hired as the Laboratory Director for the Brooklyn College Archaeological Research Center (BC-ARC). All material remains and raw documentation were transferred to Brooklyn College.

Upon arrival at BC-ARC, the collection was stabilized. Once stabilization was complete, research on the history of the area and analysis of the material and faunal remains began as a series of faculty-guided student projects. These projects yielded several student papers, at least three masters theses, and are a contributing factor to this doctoral dissertation.

The 1999 excavations revealed a complex stratigraphy within City Hall Park due to the ongoing change and development of the area. Observations by excavators and the stratigraphic evidence indicated a less complex configuration prior to the construction of City Hall and Tweed Courthouse.

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8 For a complete description of the City Hall Park 1998–1999 project, and analysis of the material remains, see the report *The History and Archaeology of City Hall Park*, Bankoff and Loorya 2008.
9 These are compiled in the 2008 report by Bankoff and Loorya.
Due to unknown circumstances, the 1999 field documentation has substantial gaps in, or a complete lack of information for, several significant features. This made materials analysis problematic. Among the most noticeable discrepancies are a lack of measurements below surface or datum, stratigraphic recordation, or accurate locational information.

In 2010 a substantial utility upgrade and renovation to City Hall began. Chrysalis Archaeology (Chrysalis) was retained as the lead firm with URS providing support services on this four-year project. Chrysalis was involved in the design phase and consideration was taken to avoid known archaeological resources, particularly burials. Over a four-year period, archaeologists monitored construction, conducted archaeological excavation, documented 42 features, and recovered over 40,000 artifacts, including faunal and human remains.

Close attention was paid during the 2010-2013 project to record the stratigraphic information and, where possible, confirm the locational information missing from the 1999 paperwork. This focus was undertaken for two purposes: first, discrepancies in the previous documentation hampered analysis and interpretation, leading to compromised results. In order to incorporate the archaeological information gleaned from the 1998-1999 study into any subsequent reports, the missing information would have to be reconciled. Secondly, inaccurate knowledge of the location of previous features could negatively impact future excavations. In some instances, features found in 1999 were re-exposed during this phase of work. In these cases, stratigraphic and locational information was recorded.
Materials analysis for the assemblages correlated deposits with specific populations. Among those recovered was an eighteenth century deposit from the Almshouse found beneath the basement of City Hall. Materials and information were recovered relative to the construction of City Hall and those who built it. This project also definitively located the Bridewell foundation.

The importance of the City Hall site lies not only in the significant number of materials uncovered -- indeed only Five Points uncovered more material remains -- but in the fact that this is the first institutional site to be studied archaeologically within the city. The majority of the sites excavated and studied within the city have been either domestic or commercial in nature. The wealth of materials uncovered at City Hall Park may enable multifaceted studies of life in eighteenth century New York for three distinct populations: the occupying British Army, prisoners, and the city’s poorest residents, or those who became wards of the city’s charity. Using a combination of historical documentary sources and materials analysis, it may be possible to construct a micro-history of this site and the persons who inhabited it. Work during the 2010 excavation recovered information and detail that will allow for the larger material assemblage to be placed into context, or within a comprehensive synthesis of this complex site.
III: DECONSTRUCTING CITY HALL PARK

It can be stated that The Common (present-day City Hall Park) was akin to the proverbial ‘everything within a single New York City block’. Though today the Park is 8.8 acres, the inhabited portion of the historic Common was approximately 5 acres. In this area upwards of 1000 people from different communities lived and worked during the eighteenth and early nineteenth centuries. There are many facets to the historic or archaeological interpretation of City Hall Park, in part, due to the density of occupation.

The past is not a static point in time; much like the present it is “always momentary, fluid and flexible” (Hodder 1997: title), as is our interpretation of it. This fluidity can lead to a host of focused socio-cultural, post-processual theoretical questions typical of recent historical archaeological research. A post-processual theoretical approach seeks to understand human behavior, the actions and motivations associated with the use of materials and the built environment, as a statement of social and/or economic conditions within a period or region (Hodder 1986; and Shackel and Little 1992). It also asks the interpreter of the past and the interpreter of the archaeological evidence and historical documents to be aware of and consider that multiple points of view are essential to understanding the past (Hodder 1986; Leone, et. al. 1987; Leone and Potter 1988; and Shackel and Little 1992). However, these points can be difficult to address within a dense urban environment such as New York City or, more specifically, within a site like City Hall Park.
In the case of City Hall Park, theoretical questions relative to specific social groups have largely been difficult to apply. The area’s spatial and temporal density with regard to occupation, development, social groups, and population has made the association of deposits with specific groups difficult, or even impossible.

The difficulties of addressing pre-determined theoretical questions within City Hall Park are amplified by the nature of the type of archaeology that has been undertaken, i.e. CRM archaeology. CRM is, for the most part, archaeology within a construction site. On a construction site, excavation is directed by different objectives than research. Schedule and funding generally do not allow for the excavation of an entire site, or even entire features. The full recovery of all relevant information generally does not occur. CRM does not allow for excavation of areas selected through research. Excavation is bound by the limits of construction.

The circumstances of CRM archaeology in construction zones is thus best suited to a broad-based approach that leaves open the opportunity to formulate questions based upon the assemblage(s) and practical methodologies. However, it should be noted that, despite its limitations, a broad focus does not negate the institutions and communities that inhabited the landscape. One of the more interesting insights revealed by this and other recent studies of City Hall Park is how past residents interacted with or adapted the physical landscape on a broad level. This is directly relevant to present day concepts of urban density that highlight the inclusion and incorporation, and not the exclusivity, of communities.
Another problem with construction-based CRM archaeology is that it is often inconsistent in methodology and documentation. The projects that have occurred within City Hall Park over the past 30 years have not always been equally or adequately recorded. Thus far there has been no attempt to incorporate all the information and interpret the area as a unique, unified site. On a practical level, some interpretive foundation must exist to pose those “questions that count”. To date there has not been a comprehensive archaeological study and/or site map of the Common, or the identification of natural strata and substrata or historic elevations. Every project has been independent with only passing consideration of the work that has occurred previously.

This dissertation seeks, in major part, to create an interpretive foundation in the form of a unified site map and to identify temporal and/or spatial land use and artifact densities in order to place into a single framework the near half a million artifacts from multiple primary and secondary contexts. This foundation is necessary for the larger assemblage to be beneficially usable for future analytical and theoretical research. In particular, the property’s historical and physical development, site formation processes, and general stratigraphic profile or context must be framed. Without this baseline context, potential overarching themes and questions cannot be addressed. A study of how the environment and landscape have been used, modified, and reused throughout the almost 300 years that this parcel of land has been occupied is a crucial component to creating this framework.

It is not enough to consider the excavated artifact assemblages, some with a substantial lack of field documentation, in isolation; there must be a historical and physical context in which to place them. This study was in many ways influenced by the lack of practical field documentation (e.g. 
stratigraphy and excavation depths) associated with the 1999 project that hindered artifact analysis undertaken from 2000 – 2008 by Brooklyn College. As a result, there was no framework for any future interpretive analysis of the assemblages. Work in 2010 highlighted the lack of a comprehensive site map that compiled all the previous archaeological work and discoveries. We found ourselves consulting 20+ years of various maps at various scales and level of detail.

The intensive use and redevelopment of City Hall Park has resulted in a great deal of temporal mixing on site with regard to structural features. There were large numbers of people living in close quarters, all leaving evidence of their activities. Due to this density, a significant amount of interdependency exists with regard to the interpretation of archaeological resources. Individual components and details combine to create the big picture. For example, eighteenth century features were repurposed in the nineteenth century and at times built upon in the twentieth century. As a result, a single feature may have multiple interpretations. At the same time, elements of the broader scope (e.g., landscape or societal mores) influenced the circumstances of specific components and details (e.g., the poor, prisoners, and their daily lives). None can be fully understood without considering the various elements in total, yet with the ability to separate them as well. Distinguishing interpretive differences among features and within the assemblages often relied on close attention to, and the recognition and tracking of, small details and anomalies. Disseminating details recognized that an eighteenth century cistern contained stratigraphic deposits from different communities during different nineteenth century periods. There is a great interdependency with regard to reliable or reasonable interpretation. Not acknowledging or considering the site’s multi-layered interdependencies does a disservice to the goal of recovering and understanding the past.
PROLOGUE

The first step in the deconstruction and reconstruction of City Hall Park for the CHARM map was establishing the environmental setting of the area. Several previous works have already sought to define the historic landscape of New York City, of which one of the most thorough is the Manahatta Project (Sanderson 2009). The Manahatta Project combined a wide range of resources and information using available technology to digitally define, depict, and ultimately recreate the original landscape and environment of Manhattan Island. Information gleaned from the Manahatta Project greatly enhanced the commonly used Sanitary and Topographical Map of the City and Island of New York (Viele 1865), which depicts the original topography of Manhattan Island relative to the modern street grid. Manahatta Project information was integral to the recent archaeological investigations of City Hall Park. Specifically, this information helped to frame and answer questions about changes in grade between the eighteenth and twentieth centuries and in the water table and, ultimately, how the construction of City Hall and the post-industrial development of the city altered the original environment.

A single, simple question regarding the water table that emerged during the 2010 excavation brought the lack of a historic framework for interpretive analysis to the forefront. The modern water table is measured at 36’ - 50’ below surface within City Hall Park¹, yet the two historic wells discovered at the site only extended to 9’ below surface. What accounted for such a drastic difference in the water level? This led to questions about and reconsiderations of the overall

¹ This was determined by the New York City Department of Design and Construction (DDC) and the various contractors of the project and passed on via personal communication (Fred Weiss 2010 and Sal Cali 2010). USGS places the water table for this area at approximately 36’ below surface (USGS 2007).
elevations and topography of the property, the physical layout and development of the historic landscape, and the accuracy of historic renderings of the structures on the property.

It quickly became apparent that little was known about the historic elevations of the area and how the property was utilized beyond hypothesized locations of historic, institutional, and municipal structures. Nowhere was this more apparent than when foundation walls of the eighteenth century Bridewell were uncovered in an unanticipated place during archaeological excavation. Further, researchers had limited knowledge about how modern development had impacted the area beyond the demolition and construction of primary structures².

The establishment of a historical and physical framework for the analysis of the archaeology of City Hall can be addressed in two sections: the built environment and the actual use of the property as reflected in the assemblages. This required compiling as much raw archaeological data as possible and then synthesizing it.

To establish a baseline by which further in-depth assessment and analysis could be undertaken, previous archaeological discoveries, architectural features, and artifact assemblages were mapped onto a single source document. The base map used is the official City of New York topographical map of City Hall Park (DDC 2013). The result is a new composite map that contains the majority of recovered archaeological features³ mapped and placed to scale on the official City map, called The City Hall Archaeological Resources Map (CHARM). CHARM presents a temporal and spatial

² As opposed to secondary support structures common of historic buildings.
³ Only archaeological features for which existing data/documentation was available could be mapped.
context for interpretation and provides researchers with an indication as to how the property has been used, formed, and transformed from the seventeenth through twentieth centuries.

THE PROCESS

To create this single source document, original field drawings were accessed whenever possible. When original field documentation was not accessible, the printed scaled maps published in site reports (by the original excavators) were used. In some instances, archaeological features from the 1999 excavation were re-exposed during the 2010 project. Any inconsistencies in the original preliminary site map were corrected and some features were re-mapped. Finally, a range of historic maps and Hunter Research’s 1990 study were overlaid and rectified to scale to place historic structures onto the modern map. Map 3.01 is an example of a historic map rectified with the modern street map.

Historic maps that were most useful included: Montresor 1776, the 1782 British Army Headquarters map, Viele 1865, McComb 1803, and several late nineteenth century atlases by Perris (1852 and 1857), Robinson (1893) and Bromley (1891 and 1899). Where possible the scale of the historic maps was verified using measurements of known points that still exist. For example, the dimensions of any historic map depicting City Hall could be confirmed by measuring off of the still extant structure.

4 This map is part of the McComb family papers 1787–1858 Collection at the New York Historical Society.
Additionally, composite maps were reassessed as part of the continual reassessment of the historic landscape. Information from these composite maps, historic references about the configuration of the area, McComb’s original site plan (Image 3.01), and several historic maps were combined to create the composite map(s) presented in this study. Using the DDC topographic survey as a base map, and City Hall as the focal point, historic maps were converted to the topographic survey map scale. As a means of control, various property dimensions were correlated for additional accuracy and consistency in translating the historic maps. Variations that existed between the measurements from the historic maps and dimensions from historic records were, in some instances, averaged. However, it should be noted that the measurements averaged never exceeded 5’ in difference. These rectified maps can now be used as historical base maps to interpret archaeological features.
Map 3.01: British Headquarters map rectified with the New York City GIS map.
Image 3.01: Architect John McComb’s original site plan for City Hall (1803).
The first step towards the reconstruction of the historic landscape of City Hall Park was to gather previous archaeological information as well as a range of scaled historic maps, from the earliest available to more recent twentieth century atlases. These maps were overlaid onto the modern base map beginning with the most recent and working backwards in time. Geographic markers, such as streets, landforms, and structures, were used as reference points. A minimum of three reference points was preferred. Overlays were completed using both the Adobe suite of programs and online historic map rectifiers such as the New York Public Library Map Warper.

Often overlays revealed inconsistencies in map detail or scale. When a bar scale was available on historic maps, measurements and distances were checked manually. Only maps with a bar scale were used, as the bar could be appropriately sized in digital representations of maps. A scale of 1 inch = 100 feet is thus dependent on having access to the original map. Measurements of structures were also checked against historic references to building dimensions and those reported in the 1993 Hunter study.

With regard to archaeological resources, both original field notes, when available, and official reports were referenced. The archaeological resources from 2010 through 2013 were initially plotted to scale on the DDC base map. During the 2010 project it was noted that there were inconsistencies in the site map created by Parsons Engineering Science (PES). At least three features discovered during the 1999 project were re-exposed. It was recognized that both size and location of the features were incorrect on the PES Architectural Features Map.
For the reconstruction, any existing original field notes from the 1999 project were utilized and features were re-plotted on the base map when possible. With regard to the 2000 Hartgen project, all features represented on the CHARM were placed according to the maps in the official report. For the 1989 archaeological work, undertaken as a Brooklyn College field school, the original student notebooks were referenced to correlate with the map provided in the 1990 report (LPC 1990).

The final result is a series of comprehensive maps and several subset maps that show area details. The main maps include:

- The 2013 NYC topographic map with all archaeological features
- The 2013 NYC topographic map with all archaeological features and historic structures
- Versions, or layers, of these maps depicting general eighteenth century and nineteenth century configurations of the property with both historic structures and archaeological features.

THE BUILT ENVIRONMENT

As stated previously, questions regarding the landscape and environment of City Hall Park arose during the 2010 project, initially during excavations in the northeast area behind City Hall (Map 3.02). Excavation in this area uncovered over 20 archaeological features dating from the eighteenth through early twentieth centuries, interspersed and atop one another and capped with the mid-late twentieth-century landscape. This approximately 1,900-square-foot area distinctly illustrated 250+ years of occupation within City Hall Park. It also clearly demonstrated the recurring theme of density and reuse seen throughout the park.
The northeast area—adjacent to the location of the first Almshouse as depicted on historic maps, Hunter’s 1994 study, and the findings of the most recent project—has been built upon multiple times, creating an amalgam of building and activity. The number and density of structural features created a complex configuration and sequence. Detailed archaeological analysis was able to synthesize the results of the excavation throughout this area with historic documents and maps and architectural information to determine a sequence for construction and use of these features. It was also able to identify changes in elevation between the present day and 1803, when the construction of City Hall began. John McComb’s diary, which details the daily progress of the early years of construction, was particularly useful in establishing shifts in the historic grade of the area. McComb noted when the construction of the foundation for City Hall began and when the basement walls were completed, detailing their height above ground surface in 1803. This information was coupled with other notations of differences in grade between the site and Broadway, as well as contemporary newspaper accounts describing the construction progress.

According to an entry in McComb’s diary dated December 5, 1803, the basement level of City Hall had been built up according to plan and the basement walls, floor to ceiling, measured 8’ feet above ground level (McComb family papers 1787–1858). When the basement interior was renovated in 1903, the architect noted that the basement floor elevation remained unchanged or was restored to its original elevation and that its walls had not been extended (Aiken 1903). Measurements taken during the 2010 project identified the basement to be 5’ above surface. The basement is a fixed point as the foundation of City Hall has not been rebuilt. Based on these measurements, the 1803 surface was approximately 3’ below modern grade. Notations regarding the elevation of Broadway with respect to the site and measurements of the basement interior
surface prior to removal of the floor, including stone footings beneath the basement floor, all produced similar numbers. Calculations determined that the floor of the basement was a mere 2’ below the 1803 surface and the foundation walls extended 5.5’ below surface.

Further evidence used in determining the difference in grade between 1803 and the present comes from the discovery of a former doorway in the northeast section of City Hall, along the north wall. Though this was not a part of McComb’s original plan (Image 3.02), architectural and archaeological evidence exists of a doorway leading from the original basement kitchen to the area behind City Hall. The shadow of this door, the exposed door sill/frame, and the basement floor were all at the same approximate level. The 2010 basement floor measured 4’ below datum\(^5\) (or 3.2’ bg); the door sill/frame (Feature 22 [2010]\(^6\)) was located at 4.6’ below datum (or 3.8’ bg) and approximately 0.2’ and 0.8’ below the 1803 grade, respectively. The 0.6’ differential is negligible when you consider the depth of the actual doorstep, which was no longer extant; only the foundation of the door sill/step was recovered.

\(^5\) The bottom step of the central stairs at the rear of City Hall served as the site datum during the 2010 project.
\(^6\) Throughout this document feature numbers are followed by the bracketed year of excavation.
Map 3.02: CHARM layer with the northeast area of City Hall highlighted.
It is likely that turn of the nineteenth century workers, while constructing City Hall, would likely have cleared only the area necessary for construction. Based on the established historic environment of the area and direct observations during the 2010 project, the soils that the workers encountered would have consisted of the fill soils from the Almshouse demolition and natural subsoils. The natural soils would have been poorly drained and contained loose unconsolidated sands with pockets of clay. Another consideration that would have ensured a conservative excavation depth for City Hall’s foundation and basement in the early nineteenth century was the relatively shallow water table, mentioned earlier. Changes in the water table are discussed later in this chapter.
While stone foundation walls that extend into the water table have been documented elsewhere, the process of constructing these walls would have required extra steps. Care would have had to have been taken to maintain excavation of the larger interior area of the proposed basement within dry soil conditions. In order to achieve this, work may have employed the use of well points. Well points are pipes inserted into the ground and from which water is drawn. They are generally small in diameter and have openings near the bottom. Water is drawn through these points via a hand pump or vacuum (siphon) system. Well points are typically installed at close centers in a line along or around the edge of an excavation. They can be installed in stages, with the first installation reducing the water level by up to 16.4’ (5m) and next placing well points at a lower level, further reducing the water level (Machmeier 1985; Powers 1992).

Consideration of the high-water table is noted in the use of the stone footings uncovered beneath the basement floor. Footings are a structural feature commonly used to raise floor joists above potentially wet conditions, permitting air and water circulation beneath the subsurface of the floor (Curtis 2012; and Morgenegg 2012). In this case, the footings extend to approximately 0.5’ above the historic water table and have been observed throughout the north side of City Hall’s basement.

Identifying the various aspects and methods of City Hall’s construction helped to determine changes in landscape elevation and assisted in bettering our understanding of the natural soils in the area. One of the more substantial features recovered during archaeological excavation was a stone retaining wall, Feature 1 [2010], that may have aided in the construction of City Hall. The stone wall dates to the early nineteenth century and was found alongside the circa 1950s concrete
areaway retaining wall (Image 3.03). Identified along the north, east, and west sides of City Hall, the wall is also likely present along the southern side of the structure.

The retaining wall was vernacularly constructed utilizing a variety of building materials readily available to the workers. Among the various stones used in the construction of the wall is cut gray stone, white marble, and brownstone. The marble and brownstone were among the original materials used for City Hall (McComb family papers 1757-1858). Considering the natural soils of the area -- loose unconsolidated sands -- the wall potentially acted as a form of shoring that enabled the workers to construct the foundation for City Hall. A possible scenario is that the workers trenched the perimeter of the proposed building footprint, constructing the retaining wall and installing well points on one side. The City Hall foundation was then constructed along the opposite wall in conjunction with excavating the interior of the basement.

The retaining wall would have created an areaway surrounding the foundation of the building. It is uncertain if the areaway remained exposed upon completion of the original construction, as it is not shown as part of McComb’s original site plan (see Image 3.02). The areaway would have been minimal, extending approximately 2’ below the 1803 grade. An areaway is depicted on the 1811 commissioners’ plan map (Map 3.03) and is suggested in some early paintings of City Hall.
Image 3.03: Stone retaining wall, Feature 1 [2010].

Map 3.03: View of the 1811 Commissioners Plan depicting an area around City Hall.
The retaining wall is not the only structural feature missing from McComb’s original plan as the aforementioned doorway that led from the basement kitchen (and another door that is visible in a 1905 photograph) are also not included. A photograph (Images 3.04 and 3.05), taken during the period of the William Aiken renovation that began in 1903, show a no longer extant side door with the words “Police Precinct” above. There have been many renovations of City Hall that have altered its configuration and access points to the exterior.

Another feature that raised questions regarding the natural and built environment was the Bridewell foundation, Feature 42 [2010], that was constructed in 1775. Despite the smallness of the area documented during excavation, the Bridewell had a surprisingly substantial foundation, extending to 13’ below grade, or 10’ below the 1803 grade, and expanding to a width of 5’ at its base\(^7\). The expanding width of the foundation functions similarly to a spread footer, for it distributed the weight of the Bridewell’s masonry walls more evenly. This structural component would have provided stability within the sandy soils of the area, particularly important as the Bridewell had a substantial basement. Based upon the recovery of materials within the walls of the

\(^7\) Although only a small portion of the foundation was excavated, it clearly demonstrated that this eighteenth century structure remains \textit{in situ}. 
Bridewell foundation, the basement floor was at approximately 10.5’ below modern grade or 7.5’ below 1803 grade. The location of this feature suggests that the front of the Bridewell was aligned with the rear of City Hall. This is a finding contrary to several nineteenth-century drawings, which show the two structures aligned at the front. However, John McComb’s site map for construction depicts the front of the Bridewell closer to the rear of City Hall (Image 3.01).

Other features on the property also raised questions regarding the difference in elevations between those measured in 2010 and 1803, when construction began on City Hall. All evidence consistently suggested an approximate 3’ change in elevation since 1803. To further document this change, several features were vertically plotted with regard to one another and, more specifically, against the existing 2010 and projected 1803 surface elevations.

Figure 3.01 is a schematic that shows the vertical relationship of various archaeological and architectural features, including City Hall, to the 2010 and the reconstructed 1803 surface elevations. Two horizontal axis lines represent the 2010 and 1803 surfaces. The horizontal relationship of feature locations or scale is not accurately represented.
Figure 3.01: Vertical location of features relative to the 2010 and 1803 surface elevations.
This schematic visually demonstrates that the majority of features are aligned to the 1803 elevation: the tops of the four cisterns at the corners of City Hall would have been exposed; the cobble surface uncovered along the Murray Street path in 1999 and 2010 was at the 1803 elevation; and the well in the northeast vault area, Feature 8 [2010], appears to have been leveled to the 1803 surface elevation. The schematic also confirms that the three wells recovered on site all extended to the same approximate depth of 9’ below modern grade, or 6’ below the 1803 grade. This brings the discussion back to the questions regarding the modern water table, which is found at approximately 50’ below the present-day surface, versus historic water levels.

Archaeological evidence provides definitive information regarding the historic water table. All the wells recovered on site extended to 9’ below modern grade and 6’ below the 1803 grade. Water wells and cisterns were common features of the eighteenth and early nineteenth century landscape. At the Common, well water might have been less brackish than in other areas of lower Manhattan as it was at the mid-point of the island and therefore possibly more suitable for consumption.

Based on archaeological evidence, it appears that the water table at City Hall Park was shallow in the eighteenth century and as late as 1803. Following the demolition of the first Almshouse in 1797, an idea was proposed in 1799 for the area to be used a public well and waterworks (Koeppel 2000:31, 2000:3), thus indicating that the water in this area was potable. Architectural evidence from City Hall’s construction also suggests a high water table. Taken together, these points seem to indicate that, as late as the turn of the nineteenth century, the project area had a shallow water table.
However, a historic shallow water table is contradictory to the existing (early twenty-first century) surrounding environmental conditions. City Hall Park, located near the center of the southern tip of Manhattan Island, is roughly equidistant from the two rivers that border the island. Research showed elevations within the project area to be approximately 40’ above mean sea level (amsl). At a nearby United States Geological Survey (USGS) monitoring well—located near the intersection of Henry and Pike Streets at an elevation of 35’ amsl—the water table is at approximately 8.44’ amsl, or 31.56’ below surface (USGS 2007). This indicates the current water table at City Hall Park is likely 5’ deeper (i.e., 36’ below surface) than its eighteenth and nineteenth century incarnations. The water table surrounding City Hall was measured during the 2010 project at approximately 50’ below surface. This is a dramatic shift from wells that were able to access water at 9’ below present day grade.

Although the hills and ponds surrounding City Hall Park have been leveled or filled, Sanderson’s GIS work as part of the Manahatta Project indicates that the project area itself has undergone little alteration (Sanderson 2009:81). It also does not appear that the landscape surrounding City Hall has been extensively built up (landfilled). Archaeological features have been exposed within 3’ of the present-day surface, the difference between the 1803 and 2010 elevations. However, archaeological evidence demonstrates that the current depth to water within the project area, and not the surface elevation, has changed significantly since the first wells were built in the eighteenth century.
There has been only one dramatic and large scale infrastructural impact to the area that could account for the drastic change in water depth: the mass construction and ensuing operation of the New York City subway system. The City Hall Loop Station lies between 25’ and 30’ below the parking lot of City Hall. This is significantly deeper than the historic water table, as determined by the documented depth of the well features recovered. The subway station and tunnels were manually excavated using a method known as “cut and cover” (Image 3.06). In this method, a trench is excavated and roofed with an overhead support system. When detailing the construction of the new Interborough Rapid Transit subway in 1904, it was stated that drains and pumps were necessary to remove water entering the system from above (IRT 1904). It was noted that water from above required controls, clearly suggesting that the construction had surpassed the water table.

Image 3.06: Beginning excavation for the City Hall subway station, circa 1901 (New York Public Library Digital Gallery).
One of the most common methods of lowering the water table during cut and cover excavation is to employ a series of deep wells and well points (Hemphill 2012). As noted above, these may have been used during the construction of City Hall as well. In the case of the City Hall subway station, a sump hole was constructed beneath the station in order to contain overhead leakage and pumping (IRT 1904). Sump No. 1, the depth of which is not known, would be a permanent fixture of the City Hall Loop Station. It originally consisted of a directly connected electrical triple plunger pump and sump pit connected to the sewer system. Both during construction and afterward, this system lowered the surrounding water table to ensure the stability of the subway tunnel by directing water to the sewer/storm drainage system (IRT 1904).

De-watering pumps still operate today in conjunction with the new subway stations and tunnels surrounding City Hall. Over 200 pump rooms and a series of deep wells operate continuously, pumping several million gallons of water per day to keep the city subway system dry. Without this system of continuous dewatering, the subway system would flood and its exterior walls would be subjected to constant wet conditions (Metropolitan Transit Authority 2012).

Both USGS and the National Oceanic and Atmospheric Administration (NOAA) state that continuous pumping of water can dramatically alter the shape and depth of the water table (USGS 2013). The substantial subsurface construction of the subway system throughout the area, specifically on the west, east, and south sides of the park, and the required associated water drainage and pumping systems has determinately altered, or modified, the natural water table of City Hall Park. However, is has been observed near South Street Seaport that blocks not
immediately adjacent to subway infrastructure still retain a noticeably shallower water table (Chrysalis Archaeology 2017).

By the time the subway was constructed in the early twentieth century, lower Manhattan no longer relied upon wells for drinking water and cisterns. Fresh water was by then being brought in from upstate New York via the Croton Aqueduct system and fed through below-surface pipes. However, cisterns were commonly used into the nineteenth century. Cisterns, generally below-ground, were mortared, brick, and plaster lined cylindrical structures that stored rainwater for task work and were a resource for firefighting during the early decades of the nineteenth century. The study of both water wells and cisterns provide insights into how the city utilized and understood the landscape and its natural resources.

The use of cisterns speaks to an economy of resources. Fresh (well) water, being a hard to get or a limited resource, was not wasted on task work. Rather, residents collected rainwater for non-consumptive use. This method of collection was still common when four cisterns were constructed (1803 – 1811) to store water for use in case of a fire at City Hall at each corner of the building. These are depicted on the 1834 Fireman’s Guide Map.

To ensure they were always at capacity, the cisterns were connected to City Hall’s roof gutters. All rainwater runoff from the roof was directed into the cisterns, similar to the way in which rain barrels are installed today. Subsurface pipes connected the gutter downspouts to the cisterns. The intake pipe was visible within the exposed interior of one of the cisterns. Historic photographs
depict drainpipes along the west wall of City Hall and going beneath the areaway in the vicinity of the archaeologically documented cisterns (Image 3.07).

The builders of City Hall went to great lengths to preserve and control water on site, specifically overflow from the cisterns. The more developed and paved city streets are, the less opportunity heavy rains have to disperse and be absorbed into the surface. This creates a situation that can lead to flood conditions. To combat potential overflow from roof runoff at City Hall, a series of drains were installed over a wide area, channeling water into several wells and other features (Image 3.08). Drains were observed on both the north, east and west sides of City Hall.

At some point the system was extended further, draining potential overflow into the open fields to the east and south of City Hall. A drain observed in the northeast vault area appeared to extend eastward, away from City Hall, and may have connected to a drain exposed alongside the east retaining wall of City Hall; the drain at the southwest corner of City Hall extended farther south, away from the building. The open fields adjacent to the area are at a lower elevation, thereby draining water away from City Hall and directing the overflow back into the ground and the water table. Map 3.04 depicts the portions of the drainage system recovered with a projection of how it was laid out based on the archaeologically observed components.
Image 3.07: Circa 1900 image showing roof downspout extending into the areaway in the vicinity of the fire suppression cisterns (Library of Congress online digital collection).
Image 3.08: Section of drainage system utilizing an eighteenth century stone well.
Map 3.04: CHARM projection of the drainage system layout based on documented portions.
The nineteenth century drainage system provides an example of how features can have multiple usages. One example is Feature 8 [2010], an eighteenth century well and drainage overflow component. Another is Feature 3 [2010], which was used as a cold storage or icehouse structure, a drainage overflow component, and a trash receptacle during and late nineteenth or early twentieth century City Hall renovation projects.

The above section identifies the historic elevation of the property and touches upon how infrastructural systems were modified and reused and/or altered the natural environment. Part of developing an understanding of the project area’s natural and built environment included using the information contained within the new composite maps to interpret the archaeological features. Part of that transformation includes the remnants or discards of human occupation.

**Trash Disposal And The Common**

Historic use of landscape and resources includes a discussion of how an area was physically inhabited and utilized. In City Hall Park, structural development was found to have occurred throughout the property, except for a portion of the eastern area between the Gaol and Barracks (Map 3.05). Analysis of the park incorporated a spatial assessment of the location and type of resources. Boundaries were defined based upon the type and location of archaeological resources and their relative position to historic structures within the property.

While some arbitrary delineation was unavoidable, areal definitions identified a strong pattern in which most of the trash deposit features were situated in the eastern side of the property. Interestingly, architectural, or structural, features were identified throughout the property, but with
minimal presence in the eastern area. While refuse deposit features were recovered elsewhere on
the property, almost all were significantly smaller than those recovered from the eastern portion.
The one exception is refuse deposit Feature 28 [2010], which is located on the western side of the
property. It was also noted that almost all of the deposits on the east side of the property dated to
the eighteenth century. Nineteenth-century deposits, again excepting Feature 28 [2010], were
smaller, contained, and generally found outside of the eastern area.

The eastern side of the property contained 91% of all artifact remains from trash feature contexts
recovered in 1999. Expanding the sample to include the eighteenth-century materials recovered
from the 2010–2011 project reduces this percentage by a mere four points. Of the eighteenth-
century materials recovered from the 1999 and 2010–2011 projects, 87% were recovered from
deposits within the east field of City Hall Park. It would appear, based on the available data, that
the majority of eighteenth-century refuse disposal occurred regularly and deliberately on the east
side of the property. The relative drop in nineteenth century deposition is in part a condition of
changing use of the property.

The presence of the Almshouse burial ground on the eastern side of the property further indicates
that the eastern side was heavily used. The mapping of the various excavation projects undertaken
for this dissertation reveals that the Almshouse burials and the eighteenth century refuse disposal
both occurred in the same eastern area of the Common, behind the Gaol, with little or no
delineation (Map 3.06). The fact that the boundary of the largest trash deposit on site lies
immediately adjacent to or within the contemporaneous burial ground has not been previously
discussed, further demonstrating the need for a baseline framework.
Map 3.05: CHARM layer depicting the circa 1775 – 1797 configuration of the area. including archaeological features.
Among the questions the use of the eastern side of the park raises is why the western portion remained open and undeveloped until the construction of the Bridewell in 1757. Was the area being used for public purposes that left little to no footprint, for example as part of the parade ground? Or, conversely, were there deposits in the area that were obliterated by the substantial construction of Bridewell? Additionally, though this question cannot be answered at this time, what can be inferred by the fact that burials of the poor and indigent were occurring in the same location as garbage disposal? Was it simply a matter of practicality, limited space, or differing perceptions of treatment of the dead and burials? Perhaps both practicality and perceptions of death were contributing factors to the shared location of these two distinct activities.
It is generally accepted that when it comes to refuse disposal, human beings seek the easiest course of action. In historical archaeology, this is often represented in former shaft features becoming trash receptacles in household back yards. While this system is feasible on the household level, it may require modification within a densely populated institutional setting. Based upon analysis of the two most recent excavations within City Hall Park (1999 and 2010), which exposed substantial portions of the property, it appears that during the mid-to-late eighteenth century, the majority of refuse disposal occurred as communal deposition on the east side of the property. During that period, this area was the least occupied and/or developed portion of the Common. The eastern portion was also the backyard of the Gaol and there is the possibility that the area was cordoned off from the barracks at the northern end of the structure (Image 3.09).
The western side of the property started to be built upon by the mid-eighteenth century with the construction of the Bridewell and the lower barracks. Additionally, the western side of the property fronted Broadway, an active thruway that had houses built upon its western edge as early as the mid-1700s. This would have made it a less likely or less feasible location for large-scale refuse.

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8 This image was obtained from Wikimedia 2012. The originally referenced location on the African Burial Ground web page is no longer active. Attempts to identify the original source have so far been unsuccessful.
disposal. The east side and southern portion of the Common were the only large open areas where major trash deposition by multiple entities could occur. Considering there were hundreds of people living on the Common—a relatively small area—at any given point in time during the eighteenth century, it would seem logical, from a modern-day point of view, that refuse disposal must be limited to a centralized location.

To be considered along with archaeological deposits and trash deposition is occupational density within the Common. Prior to 1757, the Common was only occupied by the Almshouse and the Gaol. The Bridewell added a second prison structure. Midcentury economic problems increased the number of poor in the city. The 1760s brought increasing numbers of British (and eventually Hessian) troops to Manhattan Island. During the Revolutionary War, several thousand troops inhabited the city and many lived in the barracks on the Common. One of the four barracks on the Common was constructed to house 800 men. The years leading up to and during the Revolutionary period were the most densely occupied period for the Common.

Several inherent assumptions in the above assessment make an understanding of the formation of refuse deposits within City Hall Park complicated. First is the introduction of refuse material from non-residents. The present discussion does not address issues of outside deposition—materials disposed of by persons or industries not residing on the Common. However, while it is apparent from the assemblages that some deposition from off-site persons or industries did occur, it is not immediately relevant to the presence or absence of trash deposition on site. Once an area of deposition was established, it is probable that others within the vicinity of the Common also utilized the deposition area if it was not cordoned off in some fashion. Several of the deposits on
site contain kiln furniture from local potters, which is intrusive. However, it is unlikely that non-residents would dispose of significant amounts of trash in random locations, i.e. in an area of the property not already subject to refuse disposal.

The locational analysis of the materials from the 1999 and 2010 excavations suggests concentrated refuse disposal on the eastern side of the Common. The multiple deposits excavated in this area represent long-term deposition. Due to construction constraints and field conditions, the area was excavated as several distinct depositions. However, post-excavation stratigraphic analysis has identified several of these features as a single deposit with stratified, perhaps temporal, distinctions. Figure 3.02 depicts the reconstructed stratigraphic profile for three of these separately excavated trash features.

Adding to the complexity of deposition, however, is the fact that not all refuse was disposed of in the eastern area of the property. Smaller subsidiary garbage disposal areas have been identified throughout the property. Several institutions and large numbers of people occupying the property over time would have produced significant amounts of trash. Unless the large disposal areas in the east were cleaned out at some point, there would have needed to be additional areas of refuse disposal. Some of these may not yet have been discovered, or it is equally possible they were impacted or removed by various construction works throughout the area.

The question of trash disposal is dependent on several variables. Foremost is human behavior and, as noted above, it has been repeatedly demonstrated that human beings tend to transport their “trash” in as short a distance as possible before discarding it (Rathje 2001). Despite numerous
trash disposal regulations in eighteenth century New York, garbage in the city streets remained a problem (Burrows and Wallace 1999). It is noted in contemporary documents that residents did not always follow regulations. Further, access to trash disposal within the Common is a variable. The volume of deposition recovered from the eastern portion of the property in 1999 suggests it came from a sizable community. The question, however, is whether refuse disposal was limited to residents of the Common or also came from the surrounding area? Consider the absence of physical spatial separations on the property; no documentary evidence has been discovered to prove that physical boundaries or barriers, such as fences, ever existed. As a result, the absence of such boundaries is accepted by default.

Regardless of outside deposition, multiple social groups of Common residents deposited refuse within the eastern area of the Common. At a minimum, these groups are limited to the residents of the Almshouse, Gaol, and Bridewell, as well as those occupying the British barracks.
Figure 3.02: Reconstructed stratigraphic profile of Feature 87/88/99 [1999] complex.
Though the large-scale eighteenth century deposit (the Feature 87/88/99 [1999] complex) from the east side of the property is stratified, no current method or theory exists to definitively sort materials by social group. Further muddying the association of materials issue is that all three of the social groups occupying The Common -- the poor, prisoners, and British soldiers -- tended to produce similar material assemblages. Instead, their uniqueness can only be identified in small finds, such as: military-related artifacts; quantifiably significant button-making materials comparative to other deposits; and the quality and variety of meat being consumed.

Two of the more common items recovered from the feature complex were liquor and wine bottles. While it is easy to assume that they were associated with the British military occupation, this was probably not the case. Contemporary reports indicate that alcohol was made available for prisoners to purchase in eighteenth century prisons (Johnston 2010:22–23). Likewise, it has been demonstrated at Revolutionary War era military sites that soldiers engaged in bone button making. Thus, it is clear that multiple groups are represented in the City Hall assemblages, though which materials represent which groups may remain unknown or be limited to the presence of specific artifacts.

Though the large eighteenth century feature complex deposits discussed above cannot be definitively associated with a particular group, smaller deposits, such as the large early nineteenth century deposit excavated in 2010, can be. In large part, this is because the smaller deposits have more definitive locational and/or compositional information. A good example of this is the shallow sheet deposit located in the approximate location of the western wall of the Gaol (Features 91 [1999] and 92 [1999]) (see Map 3.05). Significant fragmentation of materials and a large number
of smoking pipe stems and bowl fragments characterize this deposit. While fragmentation is
generally an indicator of a secondary or tertiary deposit, there are no other indications that these
features represent redeposition. The fragmentation is relatively uniform, affecting both glass and
pottery remains. Further, smoking pipe artifacts were not found to be unusually fragmented.
According to field documentation, the deposit was spread out, shallow, and highly compacted. It
was also not pit shaped, which would have indicated a hole being dug for redeposition. All
information suggests that Features 91 [1999] and 92 [1999] represent a heavily trodden down
surface. The percentage of smoking pipes comparative to other artifact types is significantly
greater in this deposit than is exhibited in other assemblages from the site. One might speculate
that this deposit represents, or is the result of, an area where people stood and smoked alongside
the Gaol (Image 3.10).

Placing eighteenth century deposits on the CHARM brings clarity to the locational association of
features and the landscape. For example, Feature 84 [1999] was physically separated from the
larger portion of the Common by the British barracks, making it unlikely that it includes materials
from the Almshouse, Gaol, or Bridewell. Similarly Feature 30 [1999] lies within the complex
formed by the barracks on the western side of the property.

An analysis of historic maps details the close quarters of the area. The Bridewell, Almshouse, and
Gaol are all adjacent to one another along the southern edge of the property. With one exception,
the distance between neighboring structures (Barracks included) is 125’ or less, essentially
negligible. The barracks occupy the northern two-thirds of the area, forming what appears to be a
small complex (see Map 3.05). Even so, the Bridewell is a mere 54’ (the shortest distance between
any of the structures) from one of the barracks structures and immediately adjacent to one of the Almshouse's outbuildings. Adding to space constraints was the use of part of the area as a burial ground for the Almshouse. The close quarters would likely have caused individual dumps to encroach upon the boundaries of the other structures.


The distribution of trash deposits must also be considered. With some exception, the majority of trash deposits are located along the eastern side of the Park and in close proximity to the Gaol. It may be possible that all the populations dumped their trash in one general location; it may also be possible that the prison inmates were responsible for trash collection and disposal on the Common
as part of their work requirement. Further, even if the residents of the Common disposed of their trash in a communal manner, small dumps closer to individual structures may still have existed. It may also be the case that not all of the trash deposits at the site were located during excavation, or that they had been previously compromised or destroyed. The ensuing analysis attempts to distinguish feature groups from individually excavated features that have been determined to be part of a larger whole.

The only nineteenth century refuse deposits recovered within the eastern portion of the property are Features 50-64-64-75 [1999] and 55 [1999]. As noted earlier, the nineteenth century deposits that have been recovered tend to be smaller or more contained. The largest nineteenth-century deposit recovered to date is Feature 28 [2010], discovered on the west side of the property (see Map 3.05). This feature represents a short-term or single-episode deposition tightly dated to within the first fifteen years of the nineteenth century. With the construction and opening of City Hall from 1803 - 1812, there was likely an emphasis on containing refuse disposal in the newly minted park.

Though similarly large in quantifiable terms, this nineteenth-century refuse deposit (Feature 28 [2010]) is distinct from the large-scale Feature 88 [1999] complex. First, Feature 88 [1999] dates to the last half of the eighteenth century -- the TPQ is 1762/1765 -- while Feature 28 [2010] dates to the early nineteenth century and has a TPQ of 1807. Feature 28 [2010] was a short-term deposit, while Feature 88 [1999] showed evidence of accretion over time. Feature 88 [1999] represents

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9 There are references in the Minutes of the Common Council to inmates being directed to conduct various work throughout the property of the Common.
multiple groups, while Feature 28 [2010] predominantly represents those who constructed City Hall.

Feature 28 [2010], though incompletely excavated, contained over 17,000 artifacts. It is a primary deposit dating to the first decade of the nineteenth century. Located northwest of City Hall, Feature 28 [2010] was adjacent to (east of) the Bridewell and northwest of the City Hall construction. Stratigraphically, it exhibited no evidence of being an accretionary deposit. A distinct lack of rodent disturbance supports the idea that the deposit was short term and quickly covered over. The size of the deposit suggests multiple persons or a community; the two groups occupying this area at the time in question were the Bridewell and its inmates and the workers building City Hall. The analysis suggests that this deposit has little association with the institutional residents of the area and is instead likely associated with the builders constructing City Hall. This is discussed in more detail in Chapter VI.

The association of Feature 28 [2010] with the builders, likely the master craftsmen and the supervisors, is largely indicated by the time frame of the assemblage (1800–1815) and the presence of several Masonic pipes. There are several smoking pipes that exhibit the Masonic symbols of the square and the compass. Decorated pipes could be used to show identity or association with a group. Also, within the assemblage are a range of household wares, including a variety of tablewares, though the assemblage lacks a significant percentage of utilitarian wares. The tablewares include cappuchines, flaçons, condiment bottles, a punch bowl, several teapots, and pitchers -- decidedly high-end forms/types suggestive of a more privileged population. Additionally, the faunal materials suggest a varied diet composed of high-quality portions of cattle,
a variety of fish, and delicacies, such as turtle. This variety would be inconsistent with a prison population. While undoubtedly materials from the Bridewell residents could be mixed into this assemblage, its general character suggests the assemblage is the product of another group, likely the persons constructing City Hall and/or the result of some sort of event.

The short-term depositional characteristics of Feature 28 [2010] suggest that it may have resulted from a single event. One such event could have been the inevitable cleanup of the site leading up to the opening ceremonies for City Hall in 1811. It may also reflect a single celebratory event that involved a feast or celebration among the workers constructing City Hall. The dinner paid for by the mayor, at the beginning of the project, is one such possibility. Another is the celebration that followed the cornerstone laying ceremony on May 26, 1803. According to McComb, “all the builders supped with part of the corporation at the Almshouse—had an excellent supper and plenty of good wine. We stayed until one o’clock A.M.” (McComb family papers 1787–1858). McComb also notes that the mayor gave the workmen $100 and plenty of drink. A further possibility is Evacuation Day, an annual celebration held on November 25th to commemorate the day the British left New York City following their defeat in the Revolutionary War. Regardless of the event, this deposit is one of the few tightly dated large depositions recovered from within City Hall Park.

Feature 28 [2010] is also reflective of the changing use of the area from institutional to governmental in the nineteenth century. No longer did multiple correctional institutions inhabit the property; it was becoming increasingly municipal and its public park was often used for celebration. People no longer lived within City Hall Park; the British had left approximately two decades earlier in 1783 and the City was planning to move the Second Almshouse, built in 1797,
and the Gaol to other locations. The Bridewell would be the last institutional element in City Hall park, serving as a prison until 1838.

There is, however, an interesting consistency among the larger assemblages recovered in 1999 and in 2010: the lack of rodent disturbance or gnawing of faunal elements in these deposits. This strongly suggests that the deposits were quickly covered or somehow made inaccessible. Quick coverage is the most feasible option and is indicative of attempts to control the rodent population by not providing them with a food source. It may also have been a means of controlling disease or insects that might be attracted to rotting food waste.

Several smaller refuse deposits have also been found throughout the site in various contexts. What is apparent from these smaller deposits is the pattern of land use. Based on available data, prior to the nineteenth century the majority of refuse was regularly and deliberately deposited on the east side of the property. Following the turn of the nineteenth century, there was a distinct lessening of refuse deposition on site that is not associated with various construction or renovation episodes. Refuse was no longer permanently disposed of on site by the twentieth century.

The smaller deposits provide the best opportunity to associate materials with specific groups or actions. Several of the nineteenth century deposits are associated with the workmen building or renovating City Hall. There are deposits from the early nineteenth century, the period of City Hall’s construction, as well as those that contain refuse and demolition debris associated with the early-twentieth-century renovation of City Hall. The most recent deposition on site can be associated with the 1902 William Aiken renovation of City Hall.
It is a fair to assume that, from 1803 to 1811, the workers building City Hall were most likely on site for multiple hours of the day. It may even be a possibility that some resided in one of the empty barracks structures. The multiple deposition layers recovered from Features 33 and 35 (2010), found within an eighteenth-century cistern, date to the period of City Hall’s construction. Sand was laid atop the refuse between at least four distinct deposition episodes. It is hypothesized that these deposits represent the refuse of the workmen, perhaps from their meal breaks. The no longer used eighteenth century cistern was a ready and convenient receptacle. A new crop of workers in the early twentieth century used newly defunct structures, such as Features 3 [2010] and 4 [2010], to not only dispose of their refuse, but to dispose of debris from their renovation work. This was particularly apparent within Feature 3 [2010], which contained various architectural materials, including glass panes from the removal of transoms and glass-paneled doors from the Aiken renovation.

Recovered deposits represent either singular events or the accumulation of activity by past inhabitants of the city. The deposit from Room 8C in the City Hall basement appears to be the scattered remains of occupation from the first Almshouse. In this deposit we find evidence of the task work undertaken by Almshouse inmates, information regarding diet, lost currency, and a pair of eyeglasses. This assemblage is similar to the one recovered by BC-ARC in 1989. Baugher’s analysis associated these materials with the first Almshouse.

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10 This is conjecture; there is no supporting documentary evidence that has been found to date.
Table 3.01 is a listing of all the archaeologically recovered features considered in the study, their excavation project by year, and location. Map 3.07 is an orientation map to locate the features within the property.

**Table 3.01: Archaeological features considered and identified in this study**

<table>
<thead>
<tr>
<th>FEA #</th>
<th>YEAR</th>
<th>DESCRIPTION</th>
<th>LOCATION/ CONTEXT</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>1999</td>
<td>Stone foundation (alignment/debris)</td>
<td>Island #1/ Chambers Street</td>
</tr>
<tr>
<td>9</td>
<td>1999</td>
<td>Linear deposit</td>
<td>Trench 1, between Features 6 and 10</td>
</tr>
<tr>
<td>10</td>
<td>1999</td>
<td>Stone foundation (alignment/debris) adjacent to Feature 6</td>
<td>Island #1/ Chambers Street</td>
</tr>
<tr>
<td>11</td>
<td>1999</td>
<td>Pit</td>
<td>East edge of Island #1</td>
</tr>
<tr>
<td>17</td>
<td>1999</td>
<td>Brick wall running E-W</td>
<td>Chambers Street</td>
</tr>
<tr>
<td>30</td>
<td>1999</td>
<td>Pit in E-W backhoe trench (TR 5)</td>
<td>North edge of Island #2</td>
</tr>
<tr>
<td>37</td>
<td>1999</td>
<td>Cobblestone surface</td>
<td>Murray Street Path</td>
</tr>
<tr>
<td>40</td>
<td>1999</td>
<td>19th century brick domed cistern</td>
<td>West Path</td>
</tr>
<tr>
<td>42</td>
<td>1999</td>
<td>Brick/mortar/plaster concentration west of Feature 11</td>
<td>West Path</td>
</tr>
<tr>
<td>44</td>
<td>1999</td>
<td>Dry-laid stone well</td>
<td>Island #4</td>
</tr>
<tr>
<td>46</td>
<td>1999</td>
<td>Drain line, brick w/ capstones</td>
<td>South side of Island #7</td>
</tr>
<tr>
<td>50</td>
<td>1999</td>
<td>Pit/midden deposit</td>
<td>Island #11</td>
</tr>
<tr>
<td>55</td>
<td>1999</td>
<td>Late 18th century trash deposit</td>
<td>Island #11, south edge</td>
</tr>
<tr>
<td>56</td>
<td>1999</td>
<td>Linear walkway/architectural feature; adjacent to Feature 55</td>
<td>Path between Island #11 and #13</td>
</tr>
<tr>
<td>57</td>
<td>1999</td>
<td>Drain line, running into well Feature 44</td>
<td>Island #4 at Feature 44</td>
</tr>
<tr>
<td>58</td>
<td>1999</td>
<td>Midden feature</td>
<td>Island #3</td>
</tr>
<tr>
<td>59</td>
<td>1999</td>
<td>Cobblestones and stone alignment well</td>
<td>Island #13, north edge</td>
</tr>
<tr>
<td>60</td>
<td>1999</td>
<td>Shallow basin trash dump</td>
<td>South edge of Island #2</td>
</tr>
<tr>
<td>63</td>
<td>1999</td>
<td>Stone wall</td>
<td>Island #11</td>
</tr>
<tr>
<td>64</td>
<td>1999</td>
<td>Pit/midden</td>
<td>Island #11</td>
</tr>
<tr>
<td>65</td>
<td>1999</td>
<td>Earlier pit</td>
<td>Island #11</td>
</tr>
<tr>
<td>66</td>
<td>1999</td>
<td>Brick wall</td>
<td>West Path</td>
</tr>
<tr>
<td>69</td>
<td>1999</td>
<td>19th century manhole/drain hole</td>
<td>South of Island #10</td>
</tr>
<tr>
<td>70</td>
<td>1999</td>
<td>Human remains and artifact concentration</td>
<td>South of Island #10</td>
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<td>71</td>
<td>1999</td>
<td>Artifact concentration</td>
<td>South of Island #10</td>
</tr>
<tr>
<td>72</td>
<td>1999</td>
<td>Human remains concentration</td>
<td>South of Island #10</td>
</tr>
<tr>
<td>74</td>
<td>1999</td>
<td>Bone filled refuse pit</td>
<td>Island #11</td>
</tr>
<tr>
<td>79</td>
<td>1999</td>
<td>Stone wall</td>
<td>East of Island #11</td>
</tr>
<tr>
<td>82</td>
<td>1999</td>
<td>Pit</td>
<td>Island #11, east edge</td>
</tr>
<tr>
<td>84</td>
<td>1999</td>
<td>18th century trash deposit</td>
<td>East edge of Island #9</td>
</tr>
<tr>
<td>FEA #</td>
<td>YEAR</td>
<td>DESCRIPTION</td>
<td>LOCATION/ CONTEXT</td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
<td>------------------------------------------------------------------------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>85</td>
<td>1999</td>
<td>Dark, gritty pit or post hole surrounded by Feature 86</td>
<td>Southeast of Island #11</td>
</tr>
<tr>
<td>86</td>
<td>1999</td>
<td>Lighter colored pit surrounding Feature 85</td>
<td>Southeast of Island #11</td>
</tr>
<tr>
<td>87</td>
<td>1999</td>
<td>18&lt;sup&gt;th&lt;/sup&gt; century trash deposit. Part of Feature 87/88/99 complex</td>
<td>NE of Island #11</td>
</tr>
<tr>
<td>88</td>
<td>1999</td>
<td>Large stratified 18&lt;sup&gt;th&lt;/sup&gt; century (Revolutionary era) deposit. Part of Feature 87/88/99 complex</td>
<td>NE of Island #11</td>
</tr>
<tr>
<td>89</td>
<td>1999</td>
<td>Circular stone wall; Rotunda foundation</td>
<td>East of Feature 84</td>
</tr>
<tr>
<td>90</td>
<td>1999</td>
<td>Pit feature; south of Feature 88</td>
<td>Island #11, east edge</td>
</tr>
<tr>
<td>91</td>
<td>1999</td>
<td>Artifact concentration, south of Feature 82</td>
<td>Island #11, east edge</td>
</tr>
<tr>
<td>92</td>
<td>1999</td>
<td>Artifact concentration, south of Feature 91</td>
<td>Island #11, east edge</td>
</tr>
<tr>
<td>93</td>
<td>1999</td>
<td>Linear trench, west of Feature 46</td>
<td>Island #6</td>
</tr>
<tr>
<td>94</td>
<td>1999</td>
<td>Circular post hole, west of Feature 93</td>
<td>Island #6</td>
</tr>
<tr>
<td>95</td>
<td>1999</td>
<td>Possible shaft feature, cut stone constructed, north of and abutting Feature 46</td>
<td>Island #7</td>
</tr>
<tr>
<td>96</td>
<td>1999</td>
<td>19&lt;sup&gt;th&lt;/sup&gt; century brick domed cistern</td>
<td>West Path</td>
</tr>
<tr>
<td>97</td>
<td>1999</td>
<td>Probable stone wall</td>
<td>Chambers Street</td>
</tr>
<tr>
<td>98</td>
<td>1999</td>
<td>Stone rubble</td>
<td>South of Feature 97</td>
</tr>
<tr>
<td>99</td>
<td>1999</td>
<td>18&lt;sup&gt;th&lt;/sup&gt; century trash deposit. Adjacent to Feature 87; part of Feature 87/88/99 complex</td>
<td>NE of Island #11</td>
</tr>
<tr>
<td>100</td>
<td>1999</td>
<td>Mortared flagstones</td>
<td>South of Feature 97</td>
</tr>
<tr>
<td>101</td>
<td>1999</td>
<td>Brick herringbone surface</td>
<td>Island #8</td>
</tr>
<tr>
<td>102</td>
<td>1999</td>
<td>Brick and stone foundation</td>
<td>Island #8, pathway east of Tweed Courthouse</td>
</tr>
<tr>
<td>104</td>
<td>1999</td>
<td>Pit</td>
<td>Along Park Row</td>
</tr>
<tr>
<td>120</td>
<td>1999</td>
<td>19&lt;sup&gt;th&lt;/sup&gt; century brick domed cistern</td>
<td>East Path</td>
</tr>
<tr>
<td>123</td>
<td>1999</td>
<td>Pit feature</td>
<td>Northwest corner of Tweed Courthouse</td>
</tr>
<tr>
<td>156</td>
<td>1999</td>
<td>Trash midden deposit w/ early ceramics. Adjacent to/part of Feature 87/88/99 complex</td>
<td>N510/E500 – North of Island #11</td>
</tr>
<tr>
<td>161</td>
<td>1999</td>
<td>Pit feature (May have been Feature 71) - ash/refuse pit</td>
<td>N525/E500 and E505</td>
</tr>
<tr>
<td>163</td>
<td>1999</td>
<td>Midden feature. Part of Feature 87/88/99 complex</td>
<td>North of Island #11</td>
</tr>
<tr>
<td>164</td>
<td>1999</td>
<td>Brick wall - 4 courses wide</td>
<td>Island #1</td>
</tr>
<tr>
<td>170</td>
<td>1999</td>
<td>19&lt;sup&gt;th&lt;/sup&gt; century brick domed cistern</td>
<td>East Path</td>
</tr>
<tr>
<td>174</td>
<td>1999</td>
<td>18&lt;sup&gt;th&lt;/sup&gt; century pit feature</td>
<td>Chambers Street, north of Island #1</td>
</tr>
<tr>
<td>181/</td>
<td>1999</td>
<td>Pit feature containing architectural/domestic 18&lt;sup&gt;th&lt;/sup&gt; century debris - &quot;crolius/remmey&quot; pottery, animal bones, brick</td>
<td>South of Island #13</td>
</tr>
<tr>
<td>182</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>2000</td>
<td>Stone foundation</td>
<td>Chambers Street</td>
</tr>
<tr>
<td>14</td>
<td>2000</td>
<td>Stone foundation</td>
<td>Chambers Street</td>
</tr>
<tr>
<td>15</td>
<td>2000</td>
<td>c. 1810 brick drain</td>
<td>Chambers Street</td>
</tr>
<tr>
<td>FEA #</td>
<td>YEAR</td>
<td>DESCRIPTION</td>
<td>LOCATION/ CONTEXT</td>
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<tr>
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<tr>
<td>16</td>
<td>2000</td>
<td>Second Almshouse privy, turn of the 19th century</td>
<td>Chambers Street</td>
</tr>
<tr>
<td>17</td>
<td>2000</td>
<td>Brick wall</td>
<td>Chambers Street</td>
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<tr>
<td>18</td>
<td>2000</td>
<td>Turn of the 19th century cold storage</td>
<td>Chambers Street</td>
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<tr>
<td>1</td>
<td>2010</td>
<td>Original City Hall retaining wall</td>
<td>Northeast</td>
</tr>
<tr>
<td>2</td>
<td>2010</td>
<td>Domed 18th century brick cistern</td>
<td>Northeast</td>
</tr>
<tr>
<td>3</td>
<td>2010</td>
<td>Circa 1860 pressed brick structure</td>
<td>Northeast</td>
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<td>4</td>
<td>2010</td>
<td>19th century brick structure</td>
<td>Northeast</td>
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<tr>
<td>5</td>
<td>2010</td>
<td>Flagstone and brick drainage</td>
<td>Northeast</td>
</tr>
<tr>
<td>6</td>
<td>2010</td>
<td>Soil feature - wooden box</td>
<td>Northeast</td>
</tr>
<tr>
<td>7</td>
<td>2010</td>
<td>18th century circular brick and stone feature (well) beneath the northeast corner of Feature 4</td>
<td>Northeast</td>
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<tr>
<td>8</td>
<td>2010</td>
<td>18th century stone well</td>
<td>Northeast</td>
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<tr>
<td>9</td>
<td>2010</td>
<td>Flagstone and brick drainage</td>
<td>Northeast</td>
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<tr>
<td>10</td>
<td>2010</td>
<td>Flagstone and brick drainage</td>
<td>Northeast</td>
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<tr>
<td>11</td>
<td>2010</td>
<td>Flagstone and brick drainage</td>
<td>Northeast</td>
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<tr>
<td>12</td>
<td>2010</td>
<td>19th century brick domed cistern</td>
<td>West Path</td>
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<tr>
<td>13</td>
<td>2010</td>
<td>Brick and stone drain south of Feature 12</td>
<td>West Path</td>
</tr>
<tr>
<td>15</td>
<td>2010</td>
<td>Original City Hall retaining wall</td>
<td>Northwest</td>
</tr>
<tr>
<td>16</td>
<td>2010</td>
<td>Brick and stone drain north of Feature 12</td>
<td>West Path</td>
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<tr>
<td>17</td>
<td>2010</td>
<td>Brick shaft feature north of Feature 16</td>
<td>West Path</td>
</tr>
<tr>
<td>18</td>
<td>2010</td>
<td>Large stone shaft feature east of/adjacent to Feature 17 capped with mortar and bluestone</td>
<td>West Path</td>
</tr>
<tr>
<td>19</td>
<td>2010</td>
<td>Slab-capped drain north of Feature 18; running north-south connecting Feature 18 and Feature 20</td>
<td>West Path</td>
</tr>
<tr>
<td>20</td>
<td>2010</td>
<td>19th century brick domed cistern; north end of west path; at north end of Feature 19</td>
<td>West Path</td>
</tr>
<tr>
<td>22</td>
<td>2010</td>
<td>Stone door frame/sill beneath east window of Basement Room 8C</td>
<td>Northeast Areaway</td>
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<tr>
<td>23</td>
<td>2010</td>
<td>Brick wall; lower than Feature 1 retaining wall</td>
<td>Northeast Areaway</td>
</tr>
<tr>
<td>25</td>
<td>2010</td>
<td>Stone wall beneath Feature 22</td>
<td>Northeast Areaway</td>
</tr>
<tr>
<td>26</td>
<td>2010</td>
<td>Stone wall beneath retaining wall (F.1); just north of Feature 23</td>
<td>Northeast Areaway</td>
</tr>
<tr>
<td>27</td>
<td>2010</td>
<td>Circular deposit north of Feature 28 (Manhole 3)</td>
<td>North West Path</td>
</tr>
<tr>
<td>28</td>
<td>2010</td>
<td>Midden in southwest portion of Manhole 3</td>
<td>North West Path</td>
</tr>
<tr>
<td>29</td>
<td>2010</td>
<td>Midden in southeast portion of Manhole 3</td>
<td>North West Path</td>
</tr>
<tr>
<td>30</td>
<td>2010</td>
<td>Stone circular shaft feature (well)</td>
<td>Tweed Manhole</td>
</tr>
<tr>
<td>31</td>
<td>2010</td>
<td>Stone drain extending northeast of Feature 30</td>
<td>Tweed Manhole</td>
</tr>
<tr>
<td>32</td>
<td>2010</td>
<td>Small midden extending northeast of Feature 3</td>
<td>Northeast</td>
</tr>
<tr>
<td>33</td>
<td>2010</td>
<td>18th century stone cistern with midden deposit beneath southeast corner of Feature 3</td>
<td>Northeast</td>
</tr>
<tr>
<td>34</td>
<td>2010</td>
<td>Wooden circle &quot;barrel&quot; at the edge of Feature 35</td>
<td>Northeast</td>
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<tr>
<td>FEA #</td>
<td>YEAR</td>
<td>DESCRIPTION</td>
<td>LOCATION/CONTEXT</td>
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<tr>
<td>35</td>
<td>2010</td>
<td>Midden deposit within 18th century stone cistern abutting Feature 1 and alongside and below Feature 3.</td>
<td>Northeast</td>
</tr>
<tr>
<td>36</td>
<td>2011</td>
<td>Stone capped brick shaft feature (manhole 3 extension)</td>
<td>West Field</td>
</tr>
<tr>
<td>37</td>
<td>2011</td>
<td>Brownstone tumble; stepped</td>
<td>West Field</td>
</tr>
<tr>
<td>38</td>
<td>2011</td>
<td>Rubble filled square soil feature north of Feature 36</td>
<td>West Field</td>
</tr>
<tr>
<td>39</td>
<td>2011</td>
<td>Brick arch beneath Feature 37</td>
<td>West Field</td>
</tr>
<tr>
<td>40</td>
<td>2011</td>
<td>Pit feature in northwest corner of manhole 3 extension</td>
<td>West Field</td>
</tr>
<tr>
<td>41</td>
<td>2011</td>
<td>Schist foundation wall beneath Feature 37 and Feature 39</td>
<td>West Field</td>
</tr>
<tr>
<td>42</td>
<td>2011</td>
<td>Midden deposit within Feature 41</td>
<td>West Field</td>
</tr>
<tr>
<td>43</td>
<td>2011</td>
<td>Cobblestone walkway southwest of City Hall</td>
<td>Murray Street Path</td>
</tr>
</tbody>
</table>
Map 3.07: Orientation map for Feature locations.
Archaeology is ultimately about the people - the human beings who made and utilized materials, occupied a locale, and modified their environment through deliberate action. Over the past 275 years, since the opening of the first Almshouse, several thousand individuals have inhabited City Hall Park for varying durations. These people were from various segments of New York City’s residential population: the poor and indigent, petty criminals, billeted British soldiers and/or hired Hessians, American soldiers being held as prisoners of war, construction workers, city municipal workers, and government officials. The Revolutionary War-era British bayonet recovered from a disturbed context, a set of New York State Guard buttons, and fragmented human remains from disturbed burials represent evidence of these past occupants and some of the varied activities or roles this property has served. Even if some of these artifacts are from disturbed or little understood contexts, many of the groups that occupied City Hall Park have still left evidence of their existence.

The material and feature remains recovered during the 2010 excavations, coupled with evidence from previous excavations (most notably in 1999), has provided and continues to provide a wealth of information about various aspects of New York City’s history. From the natural environment (as noted in the changing water tables), to the built environment (as noted in the changing landscape and utilization of resources), to the cultural environment (which informs about activities, diet, and identity), the archaeology of City Hall Park provides a focused window into New York City’s past.
Chapter III sets the stage for the rest of this dissertation study. By providing a general overview of how the area was conceived, developed, and re-developed, it is now possible to present specifics of layout and changes during the seventeenth through early twentieth centuries. The following chapters discuss the specific history and archaeological remains from the seventeenth, eighteenth, and nineteenth centuries. The interpretation of the archaeological features and assemblages incorporates the CHARM data, i.e. the physical placement of the features and assemblages relative to others. Analysis of the artifact assemblages has also been reconsidered with reference to the CHARM. Additionally, the trash deposit features and artifact database from the 1999 excavation has been reanalyzed. Although presented chronologically (by century), the discussion focuses on the different aspects highlighted in Chapter I regarding uses of the area.
Map 3.08: CHARM depicting all archaeological features plotted onto the official 2013 NYC topographic map.
Map 3.09: CHARM depicting all archaeological features and historic structures plotted onto the official 2013 NYC topographic map.
IV: COMMON LANDS: ARRIVING IN THE SEVENTEENTH CENTURY

Present-day lower Manhattan is a vastly different environment than the one Henry Hudson and his crew first encountered in 1609. Hudson saw a forest dotted with salt marshes and red-maple swamps, where a sea of skyscrapers and lesser buildings now exists. Instead of the modern street grid, streams and creeks meandered across the landscape. Beavers, deer, elk, black bears, wolves, turkeys, foxes, rabbits, minks, otters, and cranes thrived in this environment. The landscape undulated with many hills and gullies, as opposed to the level, easily traversed pavement tread upon daily by many. The island was so hilly that the native Lenape inhabitants named it Mannahatta, the Land of Many Hills. Settlements of the Lenape people dotted the lush island. These general descriptions offer a snapshot of early-seventeenth-century Manhattan Island. Mannahatta 1609 is a bookend for this study. It is a landscape that would be dramatically altered over the next 200 years following the introduction of the first Europeans.

CARVING MANHATTAN ISLAND

The City Hall Park project area lies within lower Manhattan Island. The area falls within the very southern end of the Manhattan Prong section of the New England Uplands physiographic province. City Hall Park and most of lower Manhattan rests upon Manhattan Schist, which is comprised of layers of medium- to coarse-grained schist and gneiss (Baskerville 1994).

During the Pliocene Epoch, 4 million years ago, one of the Island’s defining geographic features was created. A combination of erosion and uplift altered the Cretaceous cuesta, allowing a river, the present-day Hudson River, to flow into the valley between the Palisades (on the western side)
and the Manhattan Prong. At this point, Manhattan was a peninsula on its way to becoming an island. It would remain a peninsula for nearly 4,000,000 years, until the retreat of the Wisconsinan ice sheet (Bennington and Merguerian 2006).

The Wisconsinan ice sheet, or glacier, began 100,000 years before present (B.P.) and ended approximately 12,000 B.P. This glacier flowed south and was at least one half of a kilometer thick over northern New Jersey and New York City. The impacts of the weight of the glacier upon the landscape are still extant and such features can be seen in Central Park. During the advance of the ice, existing valleys were widened and glacial lakes carved out across the landscape of New York and New Jersey. Both the East and Harlem Rivers are products of the glacier (Bennington and Merguerian 2006; Cadwell 1989).

The retreat of the Wisconsinan glacier also left its mark upon the landscape. The melting ice deposited multi-tons of material. In Manhattan, this material consists of glacial till or outwash, which underlies the present ground surface and caps the bedrock formations (New York City Soil Survey Staff 2005). Glacial till consists of unsorted particles of various sizes, from boulders to pebbles to sand, which are released and left behind by the melting ice. Outwash consists of sorted and stratified materials transported away from the ice by glacial meltwater. Till then fills valleys, covers bedrock substrates, and accumulates in moraines (Bennington and Merguerian 2006). The final passage of the Wisconsinan glacier transformed Manhattan from a coastal peninsula into an island. The glacier deepened the Hudson River’s course, carved out the East and Harlem Rivers, and left behind Long Island.
The retreat of the ice also formed the characteristic hills that would give the island its Lenape name. The Land of Many Hills was formed in two main ways. First, the great weight and depth of the glacier’s advance carved away the softer bedrocks, such as the Inwood Marble, but left knobby hills of the erosion-resistant Manhattan Schist. These knobs were then covered in till and outwash during the ice’s retreat. Second, the glacier left behind hills and drifts of till, outwash, and sand (Sanderson 2009).

THE PRE-HISTORIC LANDSCAPE

The retreat of the Wisconsinan glacier left behind a vast and new ecological niche. Around 2,800 years ago, Manhattan Island’s modern environmental conditions were established. The environment Hudson entered in 1609 consisted of a dominant oak-chestnut forest and a warm moist climate (Custer 1989; Kinsey 1977; Rippeteau and Funk 1977). Available fish included catfish, sturgeon, shad, and herring. Deer, squirrels, woodcocks, wild pigeons, and turkeys inhabited the island’s forests (Sanderson 2009; and The Welikia Project 2017). Regional human groups had expanded throughout the Newark Basin and became more sedentary and specialized (Custer 1989; Kraft and Mounier 1982; Kraft 1986; Raber 1985).

It took Manhattan Island 500,000,000 years to reach this point. Following Henry Hudson’s arrival in 1609, it would take a mere 200 years to completely alter the landscape again.
THE HISTORIC LANDSCAPE

On September 12, 1609, the Dutch East India Company vessel *Halve Maen*, or *Half Moon*, sailed up a broad estuary. The captain, Henry Hudson, hoped to follow this estuary into the heart of North America and find passage through the continent to the riches of the Orient. Instead, the estuary, soon to be named the “Noorte” (North) River, became too narrow for the ship, forcing its withdrawal (Sanderson 2009; Thompson 1980). Although unsuccessful in reaching China, Hudson’s voyage documented Manhattan Island. Hudson’s logs of the voyage allowed his employers to assess the bounty of natural resources and set the stage for later European colonization.

Few written accounts survive of the *Half Moon’s* voyage up the Hudson. The descriptions of the landscape of 1609 Manhattan that do exist are informative. From Hudson’s log:

> It is a pleasant land as one can tread upon, very abundant in all kinds of timber suitable for ship-building, and for making large casks. The people have copper tobacco pipes, from which I inferred that copper must exist there; and iron likewise… [Jameson 2009:49].

Hudson’s first mate Robert Juet recorded similar thoughts about Manhattan:

> [W]e saw a very good piece of ground: and hard by it there was a Cliffe, that looked of the colour of white greene, as though it was Copper or Silver myne; and I thinke it to be one of them, but the trees that grow on it. For they be all burned, and the other places are greene as grasse, it is on that side of the River called Manna-hata. There we saw no people to trouble us: and rode quietly all night; but had much wind and rain [Juet transcribed by Barthel 2006].
The harbor and river were also a resource-laden landscape. Hudson’s crew reportedly caught “all kinds of fresh-water fish with seines, and young salmon and sturgeon” (Jameson 1909 as quoted in Sanderson 2009:24). Adriaen van der Donck’s 1652 account of New Netherland would echo this:

Practically all the waters and rivers of that country abound in fish. In the rivers, according to season and locality, we have sturgeon … Next we have carp, bass, pike, trout, minnow, silverfish, sucker, tadpoles, flounder, aal, paling, brikken, and lampreys-some preys-some as thick as a leg and more than an ell or an ell and a quarter long. (Adriaen van der Donck. A Description of New Netherland (The Iroquoians and Their World) (Kindle Locations 842-843)).

The landscape of what would become New Netherland had been in place for almost two and a half millennia. The “timber suitable for ship-building” was the oak-chestnut forest that had covered Manhattan by 2800 B.P. The migratory fish that the crew caught had been traveling up the North/Hudson River to mate, spawn, and die for nearly five millennia. The native Lenape, who called the area Mannahatta, occupied this landscape.

Although the Lenape did have had an impact on the Island’s ecosystem and landscape, it certainly was not as significant as the European-wrought changes that would follow. Contact period Lenape were a settled and sedentary people. The dual advances of agriculture and pottery allowed for larger tracts of tended crops and the means to store bounty. These developments also resulted in the Lenape people’s ability to inhabit the island year-round.

The Lenape lived in multi-family villages near their fields. The villages would have been on terraces above sources of freshwater and near fertile cultivatable ground, and would have possessed rich environmental resources (Custer 1989; Kraft and Mounier 1982; Kraft 1986; Raber
1985). Therefore, many Lenape settlements would have been located along banks of the North (Hudson), South (East), and Harlem Rivers. Hudson’s crew traded for a “great store of very good oysters” with canoe-borne Lenape who probably inhabited one of these coastal villages. Many more of the Lenape inhabited the interior and may have not encountered the Half Moon. They built their villages upon the many hills that gave the island its name. These hills looked down upon sources of freshwater, streams and ponds, and marshy areas, which provided potable water and many animal resources. The hilltops themselves were flat, fertile, and easily planted (Sanderson 2009).

The Lenape villages necessitated some clearing of the local forests and conversion of said forest into longhouses and palisade walls, but it was the farming that had the largest environmental impact. The Lenape cleared their fields using swidden agriculture, a process that entailed burning swathes of the forest and felling any remaining trees. The fire removed all the smaller trees and underbrush and the resulting ash helped fertilize the soil. The open, fertile plots were planted with maize, beans, and squash (Custer 1989; Kraft and Mounier 1982; Kraft 1986; Raber 1985). This process opened gaps in the landscape and began the initial large-scale human alteration of Manhattan Island.

It is possible some occupation occurred in the vicinity of present day City Hall Park, which was just southwest of what would be known as the Collect Pond, the main body of fresh water on this part of the Island. The modern roads of Broadway and Bowery were once native trails that traversed the Island and would be adopted by the European settlers (Map 4.01).
Map 4.01: Lower Manhattan base map depicting 1609 ponds, streams and Lenape trails (based on Sanderson 2009).
THE DUTCH PERIOD

Fifteen years after Hudson’s report reached the Dutch East India Company, there were Dutch settlements on Manhattan Island (Thompson 1980).

Although Henry Hudson was in the employ of the Dutch East India Company, it was the Dutch West India Company that began settlement on Manhattan Island. The Dutch West India Company (DWIC) was formed in 1621 with the intention of establishing trading posts and settlements in North America, the Caribbean, Brazil, and Africa. By 1624, they had settled several forts on Manhattan Island and farther upriver. In 1626, they purchased the “Island of Manhattes” from a local Lenape group, named it New Netherland, and began the next phase of landscape alteration (Thompson 1980).

In 1625, less than twenty years after Henry Hudson’s exploration of Manahatta, Dutch settlers began erecting New Amsterdam, the capital of New Netherland. New Amsterdam was established south of present-day City Hall Park. The lower Manhattan of the early Dutch period did not resemble the contours of the modern city. What existed in 1625 were Lenape settlements situated around a large freshwater pond. This was the Collect Pond, originally named the Kalck by the Dutch and also sometimes simply called “Fresh Water.” The Collect Pond was a kettle pond, formed by the retreating Wisconsinan glacier when it left behind a large block of ice. The melting waters of the main glacier transported multi-tons of material (outwash) that surrounded the castoff ice block. When the ice block melted, the cavity left behind became a pond (Steinberg 2015; Sanderson 2009).
The Collect Pond was also the only fresh water source in the area of the southern tip of the Island. In its natural state, the Collect Pond was approximately 70’ deep and fed by underground springs. The Collect Pond would be the main source of drinking water for lower Manhattan for nearly 200 years (Koeppel 2000; Sanderson 2009). Because Manhattan Island is situated within a tidal estuary, the water from the encompassing rivers and nearby ground water was brackish and non-potable. Therefore, all potable water on the Island had to come from underground springs and/or rainwater collected in cisterns. A much smaller pond was located just to the south of the Collect, separated by a narrow band of land. This smaller pond was generally known as the Little Collect or the Powder House Pond, so named for the Powder House situated on the narrow strip of land between the two ponds (Map 4.02).

To the south of the two ponds was a broad, flat-topped hill that would eventually became City Hall Park. To the west of the pond was a 40’ high hill known as Kalck Hoek, a Dutch name that referred to the numerous oyster shells that lined this hillside. North of the pond was Bayard’s Mount, which rose to 110’. Eastward were two geological formations. The first was a broad stretch of uplands with bluffs overlooking the East River. The second was Corlear’s Hook, an 80’ tall formation that once jutted out into the East River within what is now the Lower East Side (Sanderson 2009).

Near the City Hall Park project area, numerous streams and creeks fed by the Collect Pond meandered among many hills, in turn feeding many wetlands and salt marshes. The major streams included the Old Wreck Brook and Lispenard Creek. Old Wreck Brook was fed by the Collect Pond and drained down a steep incline into the East River. The brook then meandered through a swampy valley bordered by the bluffs along the East River and Corlear’s Hook, creating an area
originally known as “The Swamp” and later, “Wolfert’s Marsh.” Lispenard Creek also drained from the Collect Pond, but along a longer route to the west and ultimately into the Hudson River. It ran to the north of and around Kalck Hoek through a marsh valley bounded by the Kalck Hoek and Bayard’s Mount, then turned westward to the Hudson. Lispenard Creek was sluggish, but wide enough for small boats to travel between the Hudson and the Collect Pond. Tributaries flowed south and north after the turn towards the Hudson. These tributaries fed a wide network of pastures, swamps, and salt marshes eventually known as the Lispenard Meadows. While the tops of the many hills offered fertile agricultural lands, much of lower Manhattan was comprised of these swamps and salt marshes at the bases of the hills (Sanderson 2009).

Map 4.02: Francis Maerschalck’ 1755 A plan of the city of New York from an actual survey, anno Domini, M[D]CC,LV.
Hudson foresaw the potential bounty of Manhattan Island from aboard ship. The Dutch settlement of New Amsterdam proved him correct. In November 1626, the Dutch government received its first messages concerning the settlement. The fertile nature of the hills surrounding the Collect Pond was borne out by the news that the colonists “had all their grain sowed by the middle of May, and reaped by the middle of August. They sent samples of summer grain; such as wheat, rye, barley, oats, buckwheat, canary seed, beans, and flax” (Thompson 1980:123). The sheer bounty of the other available natural resources can be seen in the manifest of the ship that brought the news of the successful settlement to Holland. Included in the cargo of this ship were “7246 Beaver skins…675 Otter skins, … Minck and Wildcat skins, and considerable Oak timber and Hickory” (Thompson 1980:123).

Formal settlement by the Dutch brought about a dramatic shift in the social and cultural history of the area that would become New York City. It has been speculated that when the representatives of the Dutch West India Company began their colony around the Collect Pond in lower Manhattan, they chose the most easily habitable and fruitful area on the island (Steinberg 2015, Sanderson 2009; and Burrows and Wallace 1999). In a relatively short amount of time, the Dutch on Manhattan had sown and reaped a surplus of crops, trapped an abundance of fur-bearing animals, and harvested a significant number of trees. The rich natural resources and temperate environment provided the necessary conditions for productive agricultural work, and the settlement expanded.

Farming in New Netherland is not as laborious and difficult as it is in this country, primarily because fencing and enclosing are not so costly, for instead of our ditches and canals, people there put up posts, pickets, or rails. Where new farmland is being prepared, wood is usually to be found on the site at the cost of labor only. Farm labor is reasonably available to those who have their own workers; without help not much can be achieved. Land with few trees, or fairly well cleared and plowed twice, is considered quite ready for sowing all winter crops. For summer crops one
plowing is enough, and if a winter crop of rye or wheat is to be sown next, the stubble is plowed under and the seed is sown right in, and in good years will grow well. (Adriaen van der Donck. A Description of New Netherland (The Iroquoians and Their World) (Kindle Locations 541-545)).

Within 16 years, the colonists greatly altered the landscape of Manhattan Island. Plantations expanded north from the southern tip of the island, covering most of lower Manhattan and occupying a few prime coastal areas. Early maps document the rapid expansion and modification as the Dutch adapted Manahatta to their lifeways. Vinckeboons’ map of 1639 (Map 4.03) shows the expansion of the Dutch farms, along with increased settlement in the lower Manhattan area, within fifteen years of settlement. Farms surrounded the Collect Pond and lined the marshlands to the north. Docks, windmills, administrative buildings, and Fort Amsterdam occupied the area between the Collect Pond and the tip of the island. Vinckeboons’ map also depicts some of the hundreds of rolling hills of Manhattan.

Towards the end of the seventeenth century, New Amsterdam had grown into a sizable town. Visscher’s 1685 map of North America has an inset that depicts the town of New Amsterdam circa 1651 (Image 4.01). Fort Amsterdam, a windmill, docks, and many houses occupy the island’s tip. In the distance, more housing and farms cover the hills. This depiction shows the most immediate impact that Europeans had on the island’s landscape—the removal of the forest that covered lower Manhattan. Another Dutch alteration of the landscape consisted of the canalization of a natural inlet known as the Heere Gracht. This wide, log-lined canal allowed ships access to the near center of town during high tide, following the course of what would one day become Broadway (Koeppel 2000). Cortelyou’s “Castello Plan” of 1660 depicts this early waterway, along with a defensive wall that would one day mark the location of Wall Street (Map 4.04).
In 1653, the newly formed Dutch city government fixed the municipal limits of New Amsterdam at the Hudson and East Rivers “as far as the Fresh Water,” the Collect Pond, and swamp. The palisade constructed along present-day Wall Street in that same year marked the military, or true, northern boundary (Stokes 1915–1928 1:39).

Cortelyou’s map does not show the Collect Pond or the Common that would become City Hall Park) as they lie beyond the palisade wall to the north (Map 4.04). This clearly demonstrates the location of the Common as outside the settled city. It also highlights one of New Amsterdam’s earliest problems and one that persisted into modern times: access to potable water. Drinking water had to either be hauled from the Collect Pond or drawn from wells closer to the city center. New York City’s first public well was constructed in 1666 by Governor Richard Nicholls within the confines of the Fort (Koeppel 2000:17). A second public well was opened in 1671 behind the Stadt Huys or City Hall (Koeppel 2000:17). The City established a network of public wells beginning in 1686 under the tenure of Mayor Stephanus Van Cortlandt (1677-1678 and 1686-1888) (Koeppel 2000:18). However, the public and private wells within the city’s walls did not tap into a deep underground spring as the Collect Pond did. Except for wells at the mid-point of the island, the water produced from wells was brackish, salty, and generally non-potable.
Map 4.03: Jan Vinckeboons’ 1639 *Manatvs gelegen op de Noot [sic] Riuier.*

Image 4.01: The inset of Nicolaes Visscher’s 1685 *Novi Belgii Novæque Angliae* showing a circa 1651 view of New Amsterdam.
The Dutch colony would undergo a cultural and political change when, in 1664, the Duke of York was granted “all of the territory between the Delaware and Connecticut rivers” by his brother James II, King of England (Burrows and Wallace 1999:72). Soon after, in part of the lead up to the Second Anglo-Dutch war (1665-1667), British warships sailed into the harbor and demanded the Dutch surrender of New Netherland. New Amsterdam’s residents did not mount any resistance and the colony was turned over by the Governor to British control. The British renamed the colony (the City of) New York (Burrows and Wallace 1999:73).
In 1673, the Dutch briefly regained control of New York City. Jurisdiction was returned to the British in 1674 as part of the treaty that ended the third Anglo-Dutch War (Rothschild 1990:11; Cantwell and Wall 2001). During the recapture of New Amsterdam, Dutch troops used the Common as a parade ground. Following the final British takeover, Dutch culture began to diminish on Manhattan Island as many Dutch assimilated into English culture. Though some elements of Dutch culture remained, the use of the Dutch language began to wane and the percentage of residents of Dutch descent in the population significantly decreased (Burrows and Wallace 1999:135–136; Rink 1986:266).

The British quickly began to effect more changes than just the name of the colony. By 1744, within eighty years of the British arrival, the city had greatly expanded beyond the extreme southern tip of the island. Valentines copy of Grim’s map dated 1742–1744 (Map 4.05) shows that the establishing street plan had expanded to the southern end of the Commons, the future site of City Hall Park. The Heere Gracht had been filled in 1676 (Koeppel 2000:19) and the area was known as Broad Street. A new palisade wall is visible to the north of the Common separating the city proper from the Collect Pond and extensive farm fields. It is notable that the Common is now within the city limits, thought it was still largely undeveloped and located on the edge of the city. Outside the city’s wall some of the more noxious industries now graced the shores of the Collect Pond. Before the 1690s, tanneries and slaughterhouses had been located near the docks. As the city grew and encompassed these areas, complaints arose about the noxious smells and offal associated with these industries. As a result, these processes were moved to outside the city’s borders. As sources of water were necessary for tanneries, both to process the hides and to wash away the polluting byproducts, the Collect Pond became an ideal site for these activities for over
a hundred years (Milne 2000). The decision to locate these high-pollution industries at the shore of the city’s closest freshwater source would lead to many problems in later years.
Map 4.05: D.T. Valentines A plan of the city and environs of New York: as they were in the years 1742-1743 and 1744 drawn by D.G.
COMMON LAND

The triangular parcel that houses City Hall Park has a deep history of being used as common land for the people of New Amsterdam/New York. Once called the “Commons”, this name refers to the abundance of cultural and natural resources, including air, water, and habitable earth, accessible to all members of society (The National Archives 2015).

Under European law and custom, the Dutch West India Company (DWIC) possessed and controlled all of Manhattan Island. The Dutch governmental charter granted DWIC exclusive trading rights and the power to manage the land as they saw fit. Initially, the DWIC could not convince people to immigrate to New Netherland in large part because much of the colony remained unsettled. To those settlers willing to immigrate, DWIC provided many opportunities to obtain land, via fees or as tenants, and become involved in profitable commercial ventures (Innes 1902:3). Immigration numbers began to increase under Peter Stuyvesant’s, the last Director-General of the Colony of New Netherlands, tenure. Following Dutch tradition, all Company lands not granted to private individuals became communal property, or “Commons”, and were used as a resource for freeholders (Burrows and Wallace 1999:23-25). In New Amsterdam, the “Common” included the lands that comprise present-day City Hall Park. Initially, the Common was used for pasturage, as well as a source of wood, lime, clay, sod, and thatch.
The communal land tradition continued under British tenure. The English definition of common land is: land owned collectively or by one person, but over which other people have certain traditional rights, such as livestock grazing, firewood collecting, or to cut turf for fuel. A person who has a right to, or over, common land in conjunction with others is called a commoner (The National Archives 2015).

Example of rights of common are:

- **Pasture** - Right to pasture cattle, horses, sheep or other animals on the Common land. This is the most typical common right.
- **Piscary** - Right to fish
- **Turbary** - Right to take sods of turf for fuel
- **Common of marl** - Right to take sand and gravel
- **Mast or pannage** - Right to turn out pigs for a period in autumn to eat mast (beech mast, acorns and other nuts)
- **Estovers** - Right to take sufficient wood for the commoner's house or holding; usually limited to smaller trees, bushes and fallen branches (The National Archives 2015).

The Dutch term *Vlackte*, or flat, was used to describe the area, suggesting that it was originally a plateau. Covered by scrub and sod, the plateau descended just north of present-day Chambers Street into a basin containing the Collect Pond, suggesting that the Common was on a rise. Potbakers Hill stood between present-day Duane and Reade Streets west of Centre Street, and Catiemuts Hill rose at present-day Park Place and Duane Streets (Map 4.06).
Roads and topography fixed the boundaries of the Common. As Lucey observed:

The western border existed as a straight extension of lower Broadway, marking the border of the Dutch West India Company farm to the west. The diagonal southeastern border of City Hall Park is more perplexing. This road, known today as Park Row, gives the park its characteristic triangular shape. Why did travelers heading north on Broadway diverge from Broadway on their way out of town? Again topography provides the answer. As Broadway passed the Common on the west side, the high ground soon dipped into the marshy drainage of the Collect. The only way to bypass the swamps was via a narrow strip of high ground to the east of the Collect and onto Bowery Lane. Therefore a traveler going north would turn northeast at present-day St. Paul’s Chapel, staying on the eastern edge of the plateau, skirting around the east side of Cateimuts Hill, and heading straight for the pass through the fresh water barrier... Cateimuts Hill, Potbakers Hill, and the Collect formed the unofficial northern border of the Common... [Lucey 2004:7-8].

Though residents readily utilized the land and its resources, free grazing proved too destructive to the farmland. In 1652, the DWIC began to develop a series of communal pastures (Stokes 1915–1928 4:167). By 1660, DWIC “had hired a herdsman to bring the town cattle up the wagon road (Broadway), bear right onto today’s Park Row, and pass the open land known as the Vlackte (Flat) en route to the Collect Pond” (Lucey 2004:3).

In 1663/1664, two carpenters, Jan de Wit and Denys Hartogvelt, received a plot of land measuring 20 x 20 rods within the Common from the DWIC (Burrows and Wallace 1999).1 On the site, they constructed a wind-powered gristmill, the first known structure on the Common. Maps suggest that the windmill stood just east of present-day Broadway and Murray Streets between 1663 and 1723 (Stokes 1915–1928 3:335). By the turn of the eighteenth century, the Common began shifting toward municipal and institutional use.

1 A rod measures 5.5 yards, putting the size of the property at approximately 100 x 100 yards.
Map 4.06: Viele’s 1865 map depicts the original landscape relative to the modern street grid (Sanitary & Topographical Map of the City and Island of New York, Egbert L. Viele 1865).
ARCHAEOLOGY OF THE COMMON

To date no direct archaeological evidence of the seventeenth century common has been found. Nor has any evidence of seventeenth century occupation or construction been recovered.

Presumably due to funding constraints on all the CRM studies undertaken to date, no paleosoils analysis has been undertaken within City Hall Park. Sanderson’s research for the Mannahata project describes the northern half of present day City Hall as a hillside landscape inhabited by moderate forest cover and small animals such as chipmunk and rabbit. Paleobotany studies of soils in relatively undisturbed areas may yet yield information of the natural environment. A 1798 painting by Robertson evokes the landscape described by Sanderson (Image 4.02).

One of the more difficult archaeological tasks has been to create a natural stratigraphic profile of the site. There are several profiles that already exist of varying areas, each revealing degrees of post-European impact. Substantially deep excavations of more than 10+ feet in 2010 identified the natural subsoils to be sandy silty loam (10YR 5/1) followed by sand (7.5YR 5/6) consistent with the Deerfield soil series as classified by the United States Department of Agriculture. Clay deposits of gray and red clays that may have been sourced by local potters were also observed in 2010 (Chrysalis Archaeology and URS 2013).

Throughout the seventeenth century, the Common was relatively undeveloped and would remain so until the third decade of the eighteenth century. However, the area was modified as it was cleared for the extraction of its natural resources. Though the Common lay outside of the formal
settlement, as evidenced by Cortelyou’s map, the city began to expand north and encroached upon
the Common relatively quickly. Increased population and economic crises led to social problems
and responses that would shape the eighteenth century Common.

Image 4.02: *Collect Pond, New York City* by Archibald Robertson 1798. (The Edward W. C.
Arnold Collection of New York Prints, Maps, and Pictures, Bequest of Edward W. C. Arnold,
1954 Accession Number: 54.90.168)
V: THE COMMON: CITY HALL PARK IN THE EIGHTEENTH CENTURY

The history and development of Manhattan Island is intertwined with commercial ventures and capitalism. As commerce grew, so did New York’s population. Development soon began moving northward of the original settlement. At the beginning of the eighteenth century, the social structure of New York had begun to “change from a relatively small, open, colonial society to a large, class-structured commercial-capitalist component of a new nation” (Rothschild 1990:3).

The population of New York grew to almost 9,000 by the early 1730s and the northern boundary of the city shifted beyond Wall Street (Burrows and Wallace 1999:144). The increased population and ensuing crowding began to exert new stresses on New York’s infrastructure. Development was booming by the mid-eighteenth century and the population grew past 13,000 (1749 Census). Alongside this growth was a significant increase in both crime and poverty (Stokes 1915-1928; Burrows and Wallace 1999). As New York expanded northward, the Common became increasingly less isolated and residential development rapidly approached its southern edge.

At the beginning of the eighteenth century only a single structure stood on the Common, the windmill erected in 1662 and re-built in 1692. Around 1720 to 1730, John Harris constructed the second structure on the Common: a one-and-a-half story house. Harris was a former builder and Alderman who occupied the house until his death in 1770. Upon his death, New York regained control of the land and the house was demolished three years later (Stokes 1915–1928; Lucey 2004). There are several contemporary notations concerning the erection of a gallows on the Common. On 20 June 1727, the Council, “Order’d there be a Publick Gallows made and Erected
upon the Common of the City at the usual place of Execution” (MCC 1675–1776 3:412). This also suggests that the Common regularly hosted public executions.

In the early to middle eighteenth century, the Common began to serve as a site for public gatherings. “The city had grown northward, so that the Commons… were conveniently near, and served as a meeting place for the citizens when some public crisis or other brought them together” (Stokes 1915–1928 1:333). The fact that there were few open green spaces in New York during this period, as evidenced on the Grim Plan of 1742, made the Common, just a short walk up Broadway, a natural gathering spot (Map 5.01). Celebrations honoring the King’s Birthday, Guy Fawkes Day, or military victories were held on the Common (MCC 1675–1776 4:163 and 5:421). Protests frequently occurred on the Common as well. Some of these protests would eventually lead to the Revolutionary War.

Despite New York’s northward expansion, however, the Common, though now within the new palisade walls, remained just “outside”, or at the edge, of town.
It was during the early to middle eighteenth century that the Common entered the second phase of its development. With the demolition of the windmill in 1723 and its use as a site for executions, the Common was slated to take on a new role for the City. The Common was identified as an ideal location for the unwanted elements of society. In the second quarter of the eighteenth century, the Common became the home of several institutions to house or incarcerate the impoverished and criminals that city’s residents did not want located near their homes or to view on a regular basis.
The first municipal structure constructed on the Common was a powder house (1728). It was built on a narrow spit of land dividing the Collect from the Little Collect Pond at the northern-most edge of present-day City Hall Park. A report by a committee of the Common Council dated July 30, 1728 and September 1728 recommended “that a little Island in the fresh water be and is hereby Appointed and Appropriated a proper piece of Ground and the most Convenient place for the building thereon A Magazine or Powder House for the Convenient and safe keeping of Gunpowder” (MCC, 1675-1776 3:449).

ALMS, ALMS FOR THE POOR

In spite of the city’s economic growth and prosperity, New York City was dealing increasingly with the problem of poverty toward the end of the first quarter of the eighteenth century. The first Almshouse, opened in 1736, was built in response to these problems (MCC 1675–1776; Lossing 1884). The building’s location on the Common enabled the diseased and the poor to be isolated from the general population, making control significantly easier. Petty criminals and many vagabonds were also relegated to the Common, at the Gaol, which opened in 1757.

Almshouses, though a very British institutional form, were equally important to the Dutch. A Dictionary of British Social History defines the British Almshouse as “institutions, usually for the old and infirm, endowed by charity. The oldest are medieval in origin, being founded by religious communities, corporations, or individuals, often for people living in a particular locality or having been employed in some trade” (Cowie 1999:5). Almshouses were founded by charity for the reception and support of the poor.
While the British definition differs somewhat from the form and function of New York City’s Almshouse, it nevertheless provides the foundation for the city’s institution. After all, New York City was a British colony and subject to British law.

Britain’s earliest Almshouses focused on aiding those who could not work due to unfortunate circumstances and were in need of assistance. The original social goal of the Almshouse was not to be used as a workhouse. Almshouses were strictly for the relief of the poor, as dictated by the Poor Law Act of 1601, which stated: “the justices of the peace were to be responsible for appointing in every parish an Overseer of the Poor, who was to collect a poor rate, relieve the sick and aged…” (as quoted in Cowie 1999:225).

It was not until 1723 that the Poor Law Act in Britain was amended to include the notion of a workhouse (Cowie 1999). A workhouse may be defined as a building that poor, able-bodied individuals enter in order to earn a living and learn a trade. It was believed that this enabled them to re-enter society as a productive member while serving their community with needed and practical labor. It is this definition that best corresponds to the development of the First Almshouse in New York City.

Between 1690 and 1723, the city’s population had almost doubled from 3,900 to 7,248 (Burrows and Wallace 1999). As the city developed into a key commercial port of geographic importance, the number of paupers, helpless dependents, and vagrants grew. Burrows and Wallace (1999) outline the relationship of the poor and wealthy in the city during this period.
According to the 1730 census, New York’s population stood at 8,622: 7045 whites and 1577 blacks. That same year a comprehensive property assessment revealed that the richest 10 percent of the city’s taxable population, some 140 merchants and landowners, held almost half of its taxable wealth. By contrast, 49 percent of white taxable held property worth 10 pounds or less—a pathetically meager sum indicating that around one-third of all whites were more or less destitute. On the assumption that virtually all blacks were no better off, nearly three fifths of the city’s inhabitants thus lived at or near the subsistence level (Burrows and Wallace 1999:144).

It was also during this period that the city experienced several health concerns, including outbreaks of yellow fever, smallpox, and measles, as well as the Economic Depression of 1729 to 1737. These events placed overwhelming pressure on the traditional parish-based system of outdoor poor relief.

New York City is unique in that its origin is Dutch. Dutch society and culture continued to exert some influence on the evolution of the city even after it became a British colony. Relief for the poor in New Amsterdam began with the Dutch Reformed Church as a parish based system to help the less fortunate. This persisted under British tenure. However, as the population grew, it became increasingly difficult for many people to find suitable employment, increasing the numbers of people who did not work. As the number of impoverished persons rose, The Church remained the sole entity tasked with dealing with this social problem. Frequently, members of a parish were asked to take in poor or destitute members. This was considered a charitable act that was looked upon kindly by the Church. The destitute would become the financial and moral responsibility of the individual or family that took them in. However, this form of charity and poor relief could not sustain itself under growing pressures.
The New York Assembly implemented the first act to attempt to control the poor at a governmental level in 1683. The “Maintaining the Poor and Preventing Vagabonds” Act allowed the government of any given town to provide relief for its poor while rejecting any new immigrants who did not appear to have sufficient means of supporting themselves (Burrows and Wallace 1999:145; and New York State 1894). This Act was intended to keep additional poor out of the Colony, but it was not successful (Burrows and Wallace 1999:145). Two years later, in 1685, a ‘poor rate’ was adopted. The ‘poor rate’ was similar in design to aspects of the British Poor Law Act of 1601. The rate was affirmed in the Ministry Act of 1693 and immediately put into effect (Burrows and Wallace 1999:145). The ‘poor rate’ was available to all who were generally thought to be the ‘deserving poor’, or those who had fallen upon bad times. All individuals who were deemed able-bodied were denied assistance of any kind, and were in fact persecuted for their lack of perceived motivation to work.

The poor rate consisted of two kinds of relief. “Outrelief”, the more popular form, was comprised mainly of grants of fuel, clothing, food, and cash. This form was most commonly provided to women and children. The second form of relief came in the form of housing in a boardinghouse on Broad Street. While this could be considered New York’s first Almshouse, it was not specifically built for that purpose. The individuals who were housed there were often old men too ill to work.

It should be noted that only a small proportion of New Yorkers actually received municipal relief as a great number of parishes continued with the tradition of providing alms to the poor. Despite the good efforts of the Church and the ‘poor rate’, it remained difficult for the City of New York
to deal with those deemed to be the ‘undeserving poor’. Despite the growing problem of unemployment -- and not taking into account the city’s reputation as a place with few vagrants and beggars -- the City Council rejected a 1699 proposal by New York Governor Bellomont for construction of a workhouse. However, one year later in 1700, the Common Council adopted legislation for removing the “Vagabonds & Idle Persons that are a Nuisance & Common Grievance of the Inhabitants” (Burrows and Wallace 1999:146).

By 1720, the problems of poverty and vagrancy began to take a toll on the city. Increases in poor taxes caused a public outcry and the Common Council, controlled by the newly elected Morrisite “party of the people,” moved to ease public pressure by voting to build an Almshouse. On November 15, 1734 it was decided by a Common Council committee that inquiries would be made about purchasing land on which to build a “poor house” (MCC 1675-1776 4:236). As indicated by the Common Council minutes of 1735, the building would not only be an Almshouse, but a workhouse as well. Along with housing the sick, the impoverished widows, and orphans, this building would put the idle back to work and incarcerate criminals (MCC 1675-1776 4:305-311).

The resulting two-story stone and brick building measured 56’ x 24’ and stood where City Hall stands today (Image 5.01). The final location chosen for the Almshouse, at the far, north end of the Common, reflects eighteen century New York society’s desire to afford relief to the poor and indigent, though at a remove. The Almshouse served five groups: “Poor Needy Persons”; “Idle Wandering Vagabonds”; “Sturdy Beggars”; “parents of Bastard Children”; and the “bastard” children (MCC 1675-1776). All of New York’s citizens had “free Liberty and Lycense to send to the said House all unruly and ungovernable Servants and Slaves there to be kept at hard labour”
(MCC 1675–1776 4:305). Inmates of the Almshouse were supplied with clothing marked with the first letters of their names by the keeper of the Almshouse. The Almshouse was furnished with materials to occupy the inmates in productive labor, as all paupers were required to work to earn their keep. They were put to work carding wool, shredding old rope for reuse, knitting, spinning, dressing hemp or flax, picking oakum, making shoes, and raising garden crops so “that such Poor as are able to work may not Eat the Bread of Sloth and Idleness, and be a Burthen to the Publick” (MCC 1675-1776 4:305).

One month after the Almshouse opened, the Common Council ordered an “Oven and Wash-house” to be built. A small building, likely the same oven and washhouse, appears to the east of the Almshouse on the Grim Plan of 1742\(^1\) (Map 5.02).

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\(^1\) David Grim drew the map of 1742 New York City in 1813. While invaluable as an historical document and highly depended-upon by historians, the Grim Plan must be viewed with the time discrepancies in mind. The map reads, “A Plan of the City and Environs of New York as they were in the Years 1742, 1743 and 1744. Drawn by D. G. in the 76th year of his age who had at this time a perfect & correct recollection of every part of the same.”
Image 5.01: The first Almshouse, constructed 1735/1737 (in Wilson 1892).
Map 5.02: David Grim’s *Part of New York in 1742* (Museum of the City of New York).
Children at the Almshouse were taught to read, write, and cast accounts so that they could be apprenticed. A churchwarden, an officer in the church who assists the clergy staff with secular matters, was appointed as the overseer of the Almshouse. The first keeper/overseer of the Almshouse, appointed in March 1736, was John Sebring, who was joined by his wife and their nine-year-old child (MCC 1675-1775 4:307).

The physical structures as well as the inmates of the poorhouse, workhouse, and house of correction were intended to be kept separate. The Minutes of the Common Council dated March 31, 1736 outlines the intended use of the Almshouse’s rooms:

That the lower room to the Eastward be for the Keeper and his Family to Dress Victuals and the poor to eat in, that the upper room to the Eastward be the lodging room for the keeper and his family, that the division of the cellar to the eastward be for hard labor and weaving, the middle division of the cellar for the provision of the cellar; and the westernmost division of the cellar for the unruly and obstinate to be confined and imprisoned in: and the other three rooms not herein particularly appropriated to be for spinning, carding, and other labor until such time as this Court shall see cause to make other alterations (MCC 1675–1776 4:310).

The Upper West room served as an infirmary. Additionally, the Common Council ordered a garden to be fenced, plowed up, and kept for growing “Roots, Herbs, etc.” Finally, the council ordered “That fetters, Gaves, Shackles, and a convenient place of whipping post be provided for the said House of Correction for punishing the incorrigible and disor[der]ly persons committed thereunto” (MCC 1675–1776 4:309–310).
Attempts at separating the workhouse, poorhouse, and house of correction were rudimentary. Increasing numbers of inmates and the small size of the structure made the tripartite division increasingly problematic. Soon, vestrymen began expressing their concern at the mixing of elderly women and innocent children with vagabonds, criminals and assorted drunks (MCC 1675–1776 VI: various entries).

Those admitted to the Almshouse ranged in age from 4½ months to 65 years. Stays at the Almshouse ranged from a day up to the death of an inmate. Among the reasons for being admitted to the Almshouse were insanity, pregnancy, blindness, being lame, consumption, vagrancy, and being an orphan (Burrows and Wallace 1999:156). The inmates of the Almshouse were held to strict daily schedules that consisted of work, prayer, and meals. This strict scheduling was very different from the experiences in the private dwellings under the earlier system of poor relief. Such conditions discouraged many from making the Almshouse a permanent home. In its first year of operation, the Almshouse only took in nineteen people: twelve adults and seven children. Within one year of the opening of the Almshouse, the Common Council drastically slashed the amount of outrelief given to the city’s poor (Burrows and Wallace 1999:157).

By 1739, the Almshouse’s infirmary room could no longer provide for the care of all inmates, partly due to continuing outbreaks of contagious diseases. Nor could the Almshouse keep the remaining inhabitants disease free. To address hygiene conditions, the Common Council constructed a small hospital in May 1739. The hospital’s mandate was to be: “A Receptacle and Conveniency of Such unhappy Poor as are or shall be Visited with any Malignant or Obnoxious disease” (MCC 1675–1776 4: 459). The increasing Almshouse population also led the Common
Council to approve the first burial ground in March 1757. The burial ground was located just east and north of the Almshouse (Lucey 2004).

By 1746 the population of the city was 11,717 (Burrows and Wallace 1999). Responding to the dramatic growth in population, the Common Council continued to address poor relief. During the 1740s and 1750s, New York put considerable effort into making the Almshouse more functional. In 1746, the Almshouse was enlarged to address the needs of an increased number of poor and/or sick residents who could no longer provide for themselves (MCC 1675–1776 5:171, 176).

During the later eighteenth century, New York experienced a rash of yellow fever outbreaks. An estimated 2,500 residents died from the fever during a single four-month outbreak in 1798 (Duffy 1968:105-109). This outbreak placed additional strain on the relatively small Almshouse and the relatively new dispensary that had been established for the outrelief of the ailing poor. As New York continued to grow throughout the eighteenth century, the number of indigent residents grew as well. By century’s end, the crumbling, old 1736 building could no longer adequately serve New York’s poor relief needs. In 1796, the Common Council decided that the Almshouse building had become obsolete. In May of that year, the council decided that a new Almshouse would “be erected on the Rear of the Ground of the present Alms House” on the site of the former Upper Barracks (present-day Tweed Courthouse) (MCC 1784-1831 2:239-240).
POVERTY IS THE MOTHER OF CRIME

As the population and poverty issues grew in the 1750s, so did the city’s crime rate. Believed to be an additional factor in the increased crime rate was the arrival, and ensuing occupation, of British soldiers in New York City (Burrows and Wallace 1999:185). Also during this time, French prisoners of war were brought to New York for incarceration, overwhelming the prison system. To deal with this burgeoning prisoner population, the Common Council noted its’ decision to build “proper and convenient Gaols on Some Grounds to the Southward of Fresh Water” (MCC October 19, 1757 as quoted in Stokes 1915–1928 4:684).

The New Gaol, also referred to as “the prison” or the “Debtor’s Prison”, was built between 1757 and 1759 to the east of the Almshouse. The structure was designed in a style typical of most pre-1795 public buildings (Image 5.02). It was constructed of stone and brick, measured 60’ x 75’, stood three and a half stories high with a cupola on top, and featured a central entry and barred windows (Hunter 1993; Stokes 1915-1928; and MCC 1675-1776).
Upon completion of the Gaol in September 1759, all prisoners housed within City Hall -- at that time located at Wall and Nassau Streets -- were moved to the new facility. Most of the Gaol housed civilian wrongdoers with a few rooms specifically set aside for debtors and paupers. The British military claimed part of the prison to detain French prisoners of war. With the combination of New York City’s criminal population, paupers, and the French prisoners of war, the New Gaol quickly filled to capacity.
Following the end of the French and Indian War (1763), New York transferred all buildings involved in municipal disciplinary authority to the Common. A gallows, public whipping post, stocks, cage, and pillory were erected next to the New Gaol in 1764. In 1767, part of the Gaol structure began to serve as a Bridewell for vagrants (Stokes 1915–1928).²

In 1770 the Council acquired the land and house to the west of the Almshouse owned by John Harris.³ The mayor sought to have the house razed because disorderly British troops were living there. However, the Board of Alderman voted that the house be “Let to such Gentlemen, professors of Physick & Surgery as have the management and care of the hospital” (MCC 1675-1776 7:200). The house was converted to a hospital and in September 1771 the Common Council announced:

The Institution of a publick Infirmary or Hospital within this City, being not only a laudable but useful Undertaking, having for its object the Relief of the indigent & diseased and founded upon the most extensive and generous Principles; this Board being truly sensible of the same, and willing to patronize and encourage so benevolent an Establishment, have agreed to grant all the right and Interest in and to the westernmost half of the Lot formerly belonging to John Harris Dec’d & others, but now to this Corporation. Containing in breadth in front of the Common 124 feet, and in length 248 feet for the purpose of building the said Hospital thereon. (MCC 1675-1776 7: 311)

The “Gentlemen, professors of Physick & Surgery” phase of the house was short-lived and it was razed in 1775. In its place, a Bridewell would be constructed. The Bridewell would serve the “correction” of “the great number of vagabonds daily skulking about this city” (New York Mercury, February 7, 1774). It was named after the British institution of the same name, the Bridewell House of Correction. Originally built as the Bridewell Palace (1515–1523) for Henry VIII, Edward VI gave the Bridewell Palace to the city of London in 1553 to house homeless children and to punish

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² By definition a bridewell is a house of correction for petty offenses.
³ This house was constructed in the 1600s.
disorderly women. When London took full possession of the palace in 1556, they turned the Bridewell into a prison, hospital, and workrooms. The term “Bridewell” has come to generally refer to such an institution.

With the Almshouse and the Gaol already on the Common, the land to the west of the Almshouse seemed the most logical location for the Bridewell (Map 5.03). Designed by Theophilus Hardenbrook, the Bridewell was constructed in 1775 (Image 5.03). It initially served as a debtor’s prison and a house of reform for those convicted of lesser crimes. During the Revolutionary War, the British used the Bridewell to house Americans captured as prisoners of war. After the war, its function returned to use as a correctional facility (Hunter 1993; Stokes 1915-1928; and MCC 1675-1776).

The Bridewell is described as a large masonry structure with a three-story central wing. The side wings were two stories each. The Bridewell sat atop a raised basement and each section had several bays. It measured approximately 39’ x 146’. Inmates used the property surrounding the Bridewell for a variety of activities, including making nails in one of the two forges (Hunter 1993; Stokes 1915-1928; and MCC 1675-1776).

Criminals incarcerated in the New Gaol were moved to the Bridewell, leaving only debtors in the Gaol. This earned the Gaol its moniker of the “Debtors’ Prison” (MCC 1784–1831 2:338). The Bridewell remained in use as a prison until 1838, when it was demolished (Hunter 1993; Stokes 1915-1928; and MCC 1784-1831).
Map 5.03: 1789 Plan of the city of New York by McComb and Tiebout.

Image 5.03: The Bridewell (Valentine’s Manual 1855).
Housing vagrants, criminals, widows, debtors, and a host of other unfortunate people in one confined area led to the need for additional burial grounds. By June 1785, the first burial ground established in 1757 had become insufficient. In June 1785, the keeper of the Almshouse requested a “more convenient Piece of Ground for the interment of the Dead from the Alms House.” The Common Council obliged, designating “the vacant Ground in the Rear of the Barricks & not in dispute be used for the interment of the deceased Persons of the Alms House & Bridewell.” (MCC 1784-1831 1:151).

THE OCCUPIED CITY

While New York City continued to grow and develop, it also faced a military threat. In the 1740s, the French and British battled for possession of Canada, New England, and parts of New York. New Yorkers feared this battle would bring conflict in the form of a French and Indian attack. Capturing New York would strategically benefit the French, as the Hudson River provided a connection to Lake Champlain and the St. Lawrence River, and would cut the English colonies in two. In 1744, New York responded to the threat by strengthening Fort George at the southern end of Broadway, constructing a palisade at the northern edge of the Common located just around present-day Chambers Street, and moving the Powder House south of the Gaol (Lucey 2004).

The Palisade was constructed of 14’ cedar logs that measured 9” to 10” in diameter; the wall was perforated with loopholes for musketry. A gate was installed at the intersection of Chambers and Broadway (Stokes 1:196). “Starting at the Hudson River just south of extensive swamplands, the palisade ran east along present-day Chambers Street passing to the north of the Common and the Almshouse along the top ridge of Cateimsuts Hill and then headed down toward the East River staying on higher ground just above the drainage from the Collect” (Lucey 2004:18). The new
Powder House was built “in the hollow near the Almshouse” in March 1747 (MCC 1675-1776 5:190). The hollow was a short distance southeast of the Almshouse (Lucey 2004).

The Common fell within the protected zone of Manhattan Island. The elevated ground of the Common was a determining factor for building the palisade to the north. Defending it from use by others through shelling of the lower land was a plus and it gave protection to the residential areas that had developed to the southeast of the Common (Burrows and Wallace 1999:168).

Tensions between the British and the French escalated in the 1750s. The British sent 1,000 troops to New York for winter quartering in 1756. Since the barracks at Fort George were inadequate and could not house many troops, the earl of Loudon, commander-in-chief of the armed forces in North America, ordered New York residents to quarter the soldiers in their homes. There was a great deal of public outcry against soldiers being billeted in private homes. The outcry led the Common Council to declare this “too unequal as well as too heavy a burthen for the Inhabitants to bear” (MCC 1675–1776 6:108) and in October 1757 to order “The Immediate providing of materials for the Carrying on and Compleating [of] Barracks to Contain Eight Hundred men… on the Commons south of Fresh Water” along present-day Chambers Street (MCC 1675–1776 6:108 and 111–112). The barracks would “Contain Twenty Rooms on a floor two stories high, to be Twenty one feet square, [and extend] four hundred and Twenty feet Long and Twenty one feet wide” (MCC 1675–1776 6:108 and 111–112); they were quickly constructed from October 31 to November 29, 1756. By legislative act, title to the barracks and the land upon which they stood would remain with New York, giving the Common Council license to rent them during times of peace (Stokes 1915–1928 4:695).
Throughout the French and Indian War (1754–1763), the economy of New York continued to grow. A housing boom, spurred by the presence of hundreds of British army and naval officers, boosted the economy throughout the 1750s and into the 1760s (Burrows and Wallace 1999:183). From 1753 to 1760, New York’s housing stock increased by over 600 houses. Military officers also supported a consumer economy of luxury items. They “created a rich new market for the luxury goods produced by local carvers and gilders, watchmakers, furniture makers, painters, pewterers and potters, silversmiths, perfumers, glovers, seamstresses, hoopmakers, and mantua makers” (Burrows and Wallace 1999:183). Even during the war years, 41 wigmakers and hairdressers were employed. The British officers also bought wine, tobacco, ceramics (likely imported) and glassware, stationery, and teas (Burrows and Wallace 1999:183).

Following the French and Indian War, a growing rift between the American colonists and England was increasingly obvious. The Commons became a rallying ground for Americans opposed to British policies, such as the Stamp Act and the Navigation Act (Burrows and Wallace 1999).

The Stamp Act was put into effect on November 1, 1765. In this act, King George III increased taxes in the colonies to pay the costs of maintaining the North American territories obtained from France in the Treaty of Paris. Tradesmen and mechanics rallied on the Common in November 1765 to protest the Stamp Act. Frequent mass meetings followed this initial meeting, as did demonstrations where those associated with the new law were often burned in effigy. During this period, the Sons of Liberty emerged as a revolutionary force that used the Common as their staging ground.
In May 1766, the British government repealed the Stamp Act. In response, the Sons of Liberty erected a pine staff on the Common with a large sign inscribed “George III, Pitt & Liberty.” This staff became known as the first liberty pole (Burrows and Wallace 1999; Sons of Liberty 2005).

Conflict between the British soldiers quartered in the barracks and New Yorkers was inevitable, and the Common was witness to an early scuffle prior to the Revolutionary War. On March 31, 1766, several Sons of Liberty “fell on an officer of the Royal Americans on the Common about Dusk, behind his back and beat him unmercifully and broke his sword, which he had drawn in his Defence” (Montresor’s Journal 1766:356–357). First blood was spilled on August 11, 1766, when a group of British soldiers cut down the liberty pole. The next day an estimated 2,000–3,000 New York residents rallied at the Common. The New Yorkers hurled bricks and stones at the troops, who charged them with bayonets, wounding some (Weekly Post-Boy, 1232, August 14, 1766; Weekly Post-Boy, 1233, August 21, 1766).

Two days later, the Sons of Liberty raised a new liberty pole. That same day, a group of soldiers parading on the Common quarreled with an angry crowd of New Yorkers, who pushed through the column of soldiers “saying that the Ground [the Common] was theirs” (Montresor’s Journal 1766:382).

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5. This referred to King George III and William Pitt, head of the British government.
Over a four-year period, the Sons of Liberty erected liberty poles that the British troops continued to cut down or destroy (LaRoche 2013:144-45). Following the destruction of the fourth pole in January 1770, the Sons of Liberty requested from the Common Council permission to erect a fifth pole on the Common as “a monument of freedom” in “the most publick place” (MCC 1675–1776 7:203–204). The council rejected this request, prompting Isaac Sears, a leader of the Sons of Liberty, to purchase the one-twelfth share of the Harris House lot on the commons that the Common Council had not yet acquired (Lucey 2004:22). On this site, New York patriots erected the fifth, and final, liberty pole (LaRoche 2013:145). The pole stood 46’ high and was topped with a 22’ mast and a gilt vane proclaiming ‘Liberty’. It remained standing until the British capture and occupation of New York in 1776 (Lucey 2004:23).

In 1776, the Sons of Liberty incited a rebellious fervor throughout New York City (Burrows and Wallace 1999). The revolutionary period saw the Common and its surrounding area develop into its familiar historic form. During this period Broadway was extended from Ann to Reade Street and Trinity Church developed its land west of the Common into streets and lots. Just north of the Common, at Ann Street and Broadway, potteries such as Crolius and Remmey leased properties (see Map 5.01).

Additional barracks, measuring 20’ x 200’, were constructed on the Common in 1774. Set between the original barracks and the Almshouse, the second barracks housed an increasing number of British troops. Sometime between 1776 and 1782, during British occupation of New York, two more barracks were built on the Common (Map 5.04). These barracks were approximately 300’ in length and located north of the Bridewell (Lucey 2004:31).
Upon receiving news of the battles at Lexington and Concord (April 1775), the Sons of Liberty seized control of the old powder magazine by the Collect Pond. By June, the British troops had been evacuated and the American colonists hastily built barricades and batteries. For over a year, the Continental Army maintained control of Manhattan. During this time, the Common served as a military parade ground and as a central gathering place (Burrows and Wallace 1999:220–225;
Lucey 2004). On July 9, 1776, the Declaration of Independence was read to a cheering crowd gathered on the triangular green of the Common (Maier 1998:156-157; Library of Congress 2016). Two months later, in August 1776, the Continental Army suffered a major defeat in the Battle of Long Island and retreated northward into Manhattan. On September 15, 1776, British General Howe forced colonial troops out of Manhattan. British troops took control of New York, beginning a seven-year occupation. Thousands of Americans, taken prisoner during the Battle of Long Island and throughout the occupation, found themselves confined in their own prisons: the Bridewell and the New Gaol, as well as on prison ships, in churches, and in sugarhouses.⁵ The Bridewell and Gaol were severely overcrowded. Treatment of the American prisoners was harsh.

As a result of the British occupation and the return of Tories who had fled under Continental control, the population of New York City increased, though housing units decreased. Many housing units were destroyed by devastating fires that occurred in 1776 and 1778. In November 1777, the British soldiers numbered 5,000; less than a year later, in July 1778, there were over 15,000 troops stationed in New York City. During the last year of the war (1782), 17,000 soldiers were garrisoned in New York (Burrows and Wallace 1999:246). As the occupying force, the British were responsible for law and order among the large civilian population. By 1777, the civilian population rose to 12,000 people (Burrows and Wallace 1999:245).

⁵ This was called the Provost during the British occupation, used to confine Patriot military officers and civilian office holders.
In response to the housing crisis a “Canvas Town” developed west of the Common at Broad Street (Burrows and Wallace 1999:251). Hundreds more were relegated to the Almshouse and rents increased by 400%. By 1778, one-quarter to one-third of the city’s total housing had been lost to over-crowding and, more permanently, through widespread fires.

The British occupation also affected food prices, which rose by 800%. To control prices, farmers from outside New York City were forced to provide food for the soldiers. The American Revolution itself also created food supply problems for the British colonies (Williams 1944:112). Shipping food to the British troops in New York City was a logistical nightmare for the British army. The Continental Army and militias frequently disrupted New York’s overland supply lines that moved provisions from the farmlands outside of New York City. Army quartermasters were forced to import food from “elsewhere in the Empire” (Burrows and Wallace 1999:151). Privateers attacked supply ships using the sea routes. The few ships that managed to get supplies through did nothing to abate the rising costs. The supplies were often spoiled and livestock seldom survived the harsh trip across the Atlantic. Apart from occasional successful raids on colonial livestock, the only meat that the occupying British received was salted meat. As the war progressed, several of the small islands off Manhattan, such as Governors Island and Randall’s Island, were used for gardens and the pasturing of sheep, cows, and pigs. Although the British troops never completely ran out of food, they often received starvation rations (Williams 1944).

In addition to the scarcity of food, soldiers had to deal with fuel shortages. Winters in New York were typically harsh, but the coldest winter on record occurred during the occupation. In the winter of 1779–1780 the entire harbor was frozen solid and no sea or land supply shipments could reach
the soldiers. This winter was so harsh it created a firewood shortage. Military authorities could not, or would not, distribute firewood to civilians, and it became so expensive that some of the city’s poorest inhabitants froze to death. A year or so later, while studying the enemy’s positions on Manhattan from the New Jersey palisades, Washington was astonished to see that ‘the island is totally stripped of trees’ (Burrows and Wallace 1999:155). In addition to the food, fuel, and housing crises, small pox, cholera, and yellow fever epidemics raged throughout the war (Burrows and Wallace 1999:151).

Between 1777–1782, the British military leadership governed through martial law after Governor Howe had disbanded the civilian government. Day-to-day governance was in the hands of a commandant aided by a small group of military leaders, 17,000 troops, and a military police that “enforced military regulations” (Burrows and Wallace 1999:249).

AFTER THE REVOLUTION

Military occupation of New York ended on November 25, 1783. The rush of New Yorkers moving back led to greater expansion of the city and areas surrounding the Common started becoming heavily residential. Despite New York’s ruinous condition due to British abuse and yet another disastrous conflagration that accompanied British withdrawal, New York had a powerful resurgence. The population boomed from about 12,000 at the end of 1783 to 23,610 two years later (Burrows and Wallace 1999:270).
In the years following the war, New York was named the nation’s first capital and entered what is referred to as its Federalist period. During this time, the Common, once so distant and isolated, became the backyard for many residents as the city’s population rose to 60,515 by the turn of the nineteenth century (Burrows and Wallace 1999:265–273).

The Common Council worked quickly to improve the Common. In April 1784, repairs were made to the Bridewell and the New Gaol, while rooms in the barracks were leased to tenants who promised to make improvements (Stokes 1915–1928 5:1215). A gallows that stood near newly built residences on present-day Park Row was moved in April 1784 to the space between the Almshouse and the Gaol (MCC 1784–1831 1:70). A fence was built around the Gaol yard, and vagrants in the Bridewell were put to work filling the Gaol yard with dirt (MCC 1784–1831 1:214, 381, 388 and 449). These were attempts to isolate these institutions from the growing residential populace in the area.

In the spring of 1785, the garden in the rear of the Almshouse was reestablished and a fence constructed around the Bridewell. By June of that year, the Almshouse burial ground, built in 1757, had run out of space, causing the keeper of the Almshouse to request a “more convenient Piece of Ground for the interment of the Dead from the Alms House.” The Common Council obliged, designating “the vacant Ground in the Rear of the Barricks & not in dispute be used for the interment of the deceased Persons of the Alms House & Bridewell” (MCC 1675–1776, 6:85–86; MCC 1784–1831 1:151, 158; Stokes 1915–1928 5:1206). Acknowledging a complaint from the commissioners of the Almshouse that the “Hospital of the House was very much crowded with the
sick,” the council ordered that four rooms in the barracks be immediately converted to a hospital for the Almshouse (MCC 1784–1831 1:278–279 and 314).

The Common Council’s plan to earn income by leasing the barracks would ultimately fail. Income was scant and the buildings remained in a dilapidated condition. The council noted “the Disposition of the Barracks which were going to ruin for want of Repair & yielded a very trifling Emolument.” (MCC 1784–1831 1:278)

The area surrounding the Common was becoming densely residential and the late 1780s saw continued efforts to improve the existing conditions of the institutions on the Common, which were becoming an eyesore. A stable and storehouse were erected at the Almshouse and renovations were made to the Bridewell. In June of 1785 the Common Council approved a plan for “enclosing the Ground commonly called the fields” with a post and rail fence (MCC 1784-1831 1: 128, 138, 144). In 1789 the powder house was removed. On January 15, 1790, the Common Council ordered the treasurer to sell both barracks behind the Almshouse. The sale did not take place, and on July 9, 1792, the Common Council ordered the demolition of the “lower” barracks (Stokes 1915 28:1290; MCC 1784–1831 1:516). In October 1790, the council ordered formal paving of the streets around the Common area (MCC 1784-1831 1:602). These actions would ultimately delineate the boundaries of the future park.
In the 1780s, the notion that the Common should be more than simply an open field was suggested and it was proposed that it should become a park like those in the great European cities. An author going by the pen-name “Agricola” recalled in Loudon’s New York Packet in November 1784 “a plan for embellishing and planting the Fields … was proposed about fifteen years ago” (Loudon’s N.Y. Packet November 29, 1784). Perhaps illustrating the spirit and evolving sense of national pride and identity of a newly independent New York City, Agricola proposed “to plant and fence in next spring that triangular spot” and that it be named “Washington’s Mall” (Loudon’s N.Y. Packet, November 29, 1784). Washington would reside nearby when serving as President, beginning in 1789, of the newly established United States of America. An editorial in the New York Packet expressed the notion that the institutions and their inhabitants were not welcome in the growing residential area. The Common is described as “a public nuisance, from which the inhabitants are infested during the summer season, with continual clouds of stinking dust” (New York Packet August 15, 1785). The author went on to suggest that instead “this place laid out with judgment and taste, would be a blessing to the inhabitants of New York, and an ornament to the City” (New York Packet August 15, 1785).

The future of the Common was in flux in the waning days of the eighteenth century as the neighborhood surrounding it developed. In 1796 the Council ordered the construction of a new larger Almshouse to replace the Almshouse built in 1735. The new Almshouse would be located where the Upper barracks formerly stood. The new building’s tenure as an Almshouse would be short-lived, however. Though still an area for institutional buildings, the first steps toward the transformation of the Common into to a public park were already underway by the 1790s.
EIGHTEENTH CENTURY ARCHAEOLOGICAL FEATURES

Once the nineteenth and early twentieth century disturbances and features are isolated and extrapolated, a clear archaeological representation of the dense eighteenth century occupation of the Common is revealed. An archaeological assessment of the park’s eighteenth century components starts with creating a compilation map with historic structures and archaeological resources placed spatially within the present day configuration of City Hall Park (Map 5.05).

Map 5.06 depicts the dominant eighteenth century structural configuration along with the documented eighteenth archaeological resources. These maps are followed by a discussion of some of the key archaeological resources.

The discussion is divided into the following sub-categories:

- The Almshouse
- The Gaol
- The Bridewell
- Trash Disposal and the Almshouse Cemetery (1999)
- Other Eighteenth Century Features
Map 5.06: CHARM eighteenth century archaeological features layer within the eighteenth century landscape.
Map 5.05: CHARM eighteenth century archaeological features layer overlaid on the present day configuration.
The Almshouse

City Hall stands today in the same location as the eighteenth century Almshouse, which was demolished in 1797. Map overlays place the Almshouse within the eastern and central portions of the present-day building’s footprint. It was previously assumed that the construction of City Hall eradicated any subsurface deposits or other remains associated with the Almshouse. However, this has proven not to be the case. Instead there have been several archaeological features documented within the footprint of City Hall and in the area immediately north of the present day building.

The first feature identified as possibly being associated with the Almshouse was a brownstone wall and associated deposits uncovered during the 1989 excavations. These were interpreted to be remnants of the Almshouse kitchen, which was a separate structure from the main Almshouse building (Baugher 2001; and Baugher and Lenik 1997). The location of the stone wall corresponds approximately with a structure seen on the 1776 Ratzer Map (Map 5.07). On the 1993 Hunter Research composite maps, the feature wall was placed such that it appears not to align with any structure and instead cuts through the eastern wall of what is identified as “First Almshouse Outbuilding #1” (Hunter 1993).
Excavations in 2010 within what was known as Room 8C in the basement of City Hall revealed a deposit associated with the Almshouse. Room 8C is the westernmost room in the east wing of City Hall; its original function was as the housekeeper’s kitchen (Map 5.08). Beneath the existing floor were stone footings, part of the original City Hall construction seen elsewhere underneath basement floors.

Below the stone footings, an artifact deposit that pre-dated City Hall was documented across eight test units excavated in Room 8C (see Map 5.09). Stratum III was noted as a single deposit that was present in all the units except one.

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6 Note: The author of this dissertation served the as the Principal Investigator and principal author for the 2010 Archaeology project. The general citation for all 2010 references is Loorya, et. al., 2014.
With little exception, the stratigraphy was consistent throughout this room. Stratum I consisted of demolition fill containing brick, mortar, cobbles, slate, and late nineteenth century ceramic tile. The fill extended to an average of 0.6’ below ground (bg), atop a compacted sand layer (Stratum II). Stratum II, observed in other basement rooms, appeared to be a bedding layer associated with the construction of City Hall. Stratum III consisted of an artifact-laden sandy fill that had a shallow basin shape (Map 5.10). Stratum IV consisted of mottled coarse brown fill sand with some gravel inclusions and was characterized by a noticeable decrease in artifact density. Though technically separate strata, the materials from Strata III and IV are the same assemblage. The final stratum, Stratum V, was a coarse sand fill layer.
Map 5.09: Plan view map of Room 8C.
Map 5.10: Profile of Test Units 8C.1 and 8C.2.
Strata III and IV contained a wide range of artifacts dating from the eighteenth century. The majority of these are Food Related faunal remains (62%) and household items (23%) (Table 5.01).

Table 5.01: Artifact count by functional group for the Room 8C deposit.

<table>
<thead>
<tr>
<th>FUNCTIONAL GROUP</th>
<th>ARTIFACT COUNT</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural</td>
<td>120</td>
<td>6.28%</td>
</tr>
<tr>
<td>Commercial</td>
<td>3</td>
<td>.15%</td>
</tr>
<tr>
<td>Food Related</td>
<td>1164</td>
<td>60.9%</td>
</tr>
<tr>
<td>Household</td>
<td>434</td>
<td>22.7%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>8</td>
<td>.41%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>33</td>
<td>1.7%</td>
</tr>
<tr>
<td>Other</td>
<td>30</td>
<td>1.57%</td>
</tr>
<tr>
<td>Personal</td>
<td>116</td>
<td>6.07%</td>
</tr>
<tr>
<td>Toy/Recreation</td>
<td>2</td>
<td>.1%</td>
</tr>
<tr>
<td>Total</td>
<td>1910</td>
<td></td>
</tr>
</tbody>
</table>

More than half of the Food Related faunal remains are unidentified mammal \((n=639)\), with only 40 faunal remains identified to the species level. The faunal assemblage, which accounts for 60\% of the assemblage, exhibits evidence of butchery, with possible knife marks on some. Though all skeletal portions are represented, the majority of the fragments are from long bones. Long bones were typically used in button production and, interestingly, worked button blanks were recovered.

Two unusual faunal fragments recovered are turtle shell. Turtle during the eighteenth century was not unknown as a pervasive food item as it was generally considered to be a luxury. With this in mind, the turtle shell could also fall within the manufacturing category, as it may have been used to craft objects like decorative hair combs.

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7 The complete artifact inventory from the 2010 City Hall Park project can be found in the site report (Chrysalis and URS 2013) available on the Landmarks Preservation Commission web site.
A variety of items make up the 434 Household related artifacts; the majority being ceramic wares (71.4%) and glass (28.1%). The glass items are mostly bottle glass with little distinction or chronological characteristics. These are largely mouth-blown or mold-blown examples.

A small copper alloy spoon and a knife are the only two utensils recovered (Image 5.04). The knife is a pistol grip knife handle composed of bone and iron that dates to 1700–1780 (Dunning 2000:30–36).

The household ceramic artifacts are predominantly refined earthenwares (n=107) and stoneware (n=97).

Image 5.04: Copper alloy spoon with egg-shaped bowl.
Among the refined earthenwares are creamware \((n=43)\), tin glazed \((n=49)\), and pearlware \((n=5)\). The number of tin-glazed sherds, which date between 1640–1800 (Azizi et al. 1996), is a deceptive time-marker because it includes 33 pieces of exterior spalled glaze with painted blue decoration, including: a medium-sized bowl sherd with a painted decoration that dates to 1700–1800 and a possible punch bowl with a purple spatter decoration also dating to 1700–1800 (Lipski 1984; Azizi et al. 1996).

The majority of creamware sherds exhibit no decoration and have a general date of 1762–1820 (Miller et al. 2000:12). Only six sherds exhibit any form of decoration. One is molded with a fluted motif and another is a molded feather edge creamware (1762–1820) (Miller et al. 2000:12). One molded sherd is possibly from a teapot in a fruit or vegetable shape and has gray/green coloring. This sherd has a refined date of 1759–1775 (Miller et al. 2000:12).

There are five Jackfield type sherds (1740–1850); one of these is a molded floral teapot finial (1740–1800) (Azizi et al. 1996; Miller et al. 2000:12). Three red-bodied refined earthenwares include a teapot spout fragment and a sherd exhibiting an engine-turned geometric pattern; the latter dates 1760–1830 and is likely a teaware (Hawkins 1999; Rickard and Carpentier 2004).

There are several identifiable forms among the 97 stoneware sherds. Among the salt-glazed/buff-bodied sherds \((n=79)\) are dish, bowl, jar/jug, mug, and porringer forms. Many of the 79 sherds exhibit some form of painted (generally blue) or slipped decoration. Among these is a cordoned, incised, and blue filled sherd and one with a blue slip decoration (1720–1820) (Janowitz 2008).
Many of these were locally produced and include pieces from Crolius and Remmey. A stoneware mug, of possible British origin, is stamped with a capacity mark and “GR” beneath the crown, likely, George Rex (King George) (Image 5.05). This mug dates from 1714–1830 (Noel Hume 1969:113 and 115).

Among the white salt-glazed stoneware sherds is a teacup with a scratch blue herringbone and floral decoration (1735–1783) (Jefferson Patterson Park 2017).

Image 5.05: Stoneware mug sherd exhibiting a capacity mark.

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8 Crolius and Remmey were among the earliest stone ware potters in New York City. They had potteries located on Pot Baker’s Hill in the vicinity of the Common beginning in the late 1720s. The two families operated a multi-generational business into the early nineteenth century (Janowitz 2008).
There are also coarse earthenware British buff-bodied slipware sherds (\(n=67\)) dating to 1670–1795 (Azizi et al. 1996). Among these are 20 sherds of a pitcher with reversed slip colors. The bulbous body with long straight neck has a dark brown slip with white slip squiggly lines. Other forms include dishes, a mug, and at least two porringer. Among the patterns are dot and combed, combed, all over slip, and dot.

Among the 25 redware sherds are slip-decorated examples, including a pan fragment decorated with a geometric motif and a pan with a trailed slip. Three of the sherds have a tortoise shell decoration. It is possible that Campbell, a local redware potter in the late 1750s and beyond, made these (Perry, et al. 2009).

Fourteen Chinese export porcelain sherds were recovered. Two of the overglaze painted sherds were identified as having a floral pattern. One of these has a very detailed floral motif on its exterior and a border on the interior with traces of gilding. Both overglaze painted sherds are teawares.

Smaller items of interest include three copper alloy coins (commercial items). All are British half-pennies. One is dated 1746 and another dates to 1727–1730 based upon the stamped image. The earlier coin depicts an image of a young King George II. The 1746 coin depicts an older King George II on the obverse and Brittania on the reverse side (Image 5.06). X-ray technology was used to obtain images of the coins because they were corroded. The third coin is highly corroded and an x-ray was only able to discern that the coin depicts of bust of King George II with the letters “GEORGE REX.” No date was visible.
There were relatively few artifacts that could be related to some of the known activities that occurred in the Almshouse, most notably button making. Eighteen bone button blanks, the byproducts of bone button manufacture, were recovered. Two of these blanks are not fully drilled, suggesting they were lost or discarded during their use (Image 5.07). Circular disks were cut from long bones with a rotating tool that had three projecting points; the center point made a hole in the middle of the button (White 2005:69). Button manufacture was a common form of task work given to inmates of Almshouses and prisons in order to reform them (Baugher 2009:8). These artifacts are a product of that practice.

There are several items classified as personal objects and the majority of these are smoking pipe fragments (77.5%), pipe stems ($n=85$), and pipe bowl fragments ($n=31$). Most of the pipe stems are undecorated, though a few exhibit maker’s marks or initials. Some of the marks found on the pipes include “R. Tippet,” “RT,” “W G,” and “TD.” The “W G” mark is dated 1775 to 1835 (Reckner and Dallal 2000).

One of the pipe bowls, consisting of the bowl with the stem, has a large oval heel and is heavily smoked. The left side of the heel is marked with a “T” under a heart and the right side is marked with a “D” under a heart. Another pipe bowl has a molded pattern with the letters “I B”. The last of the decorated pipe bowls is a complete bowl with a Masonic motif. The molded pipe has a stag’s head facing the smoker and fluting on the back of the bowl, with garlanding and flowers on both faces (Image 5.08). The left face of the pipe depicts the Liver bird, a symbol of Liverpool, England which was a center for pipe manufacturing (Liver Bird 2012). A faint square and compass occupy the right face.
Personal clothing related items recovered include two buckles: an iron shoe buckle and a copper alloy buckle. Among the remaining clothing items are 10 buttons. The buttons include two stamped copper alloy buttons, a domed two-piece button, a domed button with hand applied loop, and a hollow domed button with a vent hole on the back. The two non-copper alloy buttons are a plain bone button with a single center hole and a stamped brass button with a basket weave motif and four-hole bone back. Other objects in this group include two pieces of a cut/carved bone lice comb and nine copper alloy pins, eight with wrapped heads.

A pair of copper Nuremberg single wire eyeglass frames spectacles are also part of the assemblage (Image 5.09). Available from the seventeenth through eighteenth century, these were most common during the early-eighteenth century (College of Optometrists 2012). An eyeglass lens fragment was also recovered and appears to be a match for the frames.

Other objects include two buff-colored clay playing marbles and a piece of worked gray English flint with some edge damage. This is likely spall from a gunflint or strike-a-light. A strike-a-light is sharp flint tool, usually a recycled gunflint, that was struck against a steel rod or bar to create sparks to start a fire.

The remaining object of note is a 1770s Hispania silver half real coin with two pierced holes (Image 5.10). The numbers “177_” were visible and the last digit could not be discerned. Based on the size, this coin was probably a half real and could possibly have been used as a protective amulet (Lees and Beck 2007). These holes may have helped to sew the object onto an article of clothing; the holes appear too small to have a cord threaded through for wear as a necklace.
Image 5.06: British halfpenny. Obverse: Old Laureate and Armored Bust facing left, “GEORGIVS·II·REX.” Reverse: Britannia seated with shield facing left, holding spray and spear, “BRITANNIA” (1746) in exergue.

Image 5.07: Bone button blanks.
Image 5.08: Pipe bowl with stag’s head facing the smoker.

Image 5.09: Nuremberg single wire spectacles frames.
The materials recovered from Strata III and IV generally have an eighteenth-century date with the TPQ of each excavation unit falling between 1762 and 1775. The TPQ for the assemblage as a whole is 1775 (Chrysalis Archaeology and URS 2013).

Several characteristics of the assemblage suggest that it was part of a pre–City Hall deposit. All diagnostic artifacts taken together results in a 1775 TPQ and a date range of 1699–1811 for the assemblage. The range of pottery types, including wasters from the local potteries, suggests an ongoing acquisition of materials or a collection of donated materials. There is evidence of task work, manufacture, and sewing present in the form of bone button blanks -- two only partially worked with the buttons still attached -- and several copper alloy straight pins. Though food related and household artifacts dominate the assemblage, the manufacture and personal groups are fairly evenly represented (Figure 5.01). Finally, this deposit was uncovered beneath a compacted sand
layer that was sterile except for three artifacts from a single unit. This layer, observed throughout the basement, is characteristic of a bedding layer for construction.

![Figure 5.01: Graphical representation of the Room 8C assemblage functional groups.](image)

The composition and provenience of the assemblage suggests an association with the cellar of the eighteenth-century Almshouse. The Almshouse was situated at the approximate east-central portion of present-day City Hall (see Map 5.05). The cellar of the Almshouse was divided into three sections. The eastern section was used for task work and weaving and the adjacent central portion housed provisions. The Almshouse kitchen was located on the eastern end of the first floor (MCC 1675-1775). The materials recovered from this deposit are consistent with items acquired through various donations over time. The New York Almshouse, like those in other locations, relied on charitable donations of goods. The assemblage contains materials consistent with task
work assigned to inmates. Common chores included button making, picking oakum⁹, and weaving (MCC 1675-1776 various entries).

The provenience of the basement Room 8C assemblage also suggests that it may be part of a larger deposit that was disturbed by the construction of City Hall, or perhaps it was redeposited. The distinct lack of later intrusive material makes redeposition unlikely. The assemblage is consistent with the tasks and household related activities of an Almshouse assemblage (Baugher and Lenik 1997; Kaktins 2012 and in process). This deposit is yet another example of construction leaving intact pockets of the past across the lower Manhattan landscape.

Additional artifact deposits likely associated with the Almshouse were found in a test unit, E3 [2010], along the exterior eastern end of City Hall. The materials suggest late-eighteenth century kitchen refuse. Though similar material was uncovered in two other test units, it was in significantly lesser amounts and showed no evidence of being a discrete deposit. The deposit, in Test Unit E3 [2010], appears to be a pre–City Hall trash deposit impacted by the construction of the City Hall stone retaining wall.

Initially composed of large mammal bone and oyster shell, the deposit eventually was found to contain a range of materials. Field observations noted that the deposit appeared to reflect eighteenth century kitchen waste.

⁹ This is the unraveling, or untwisting of old rope.
The Test Unit E3 [2010] assemblage consists of 147 artifacts. The majority are household artifacts (55.7%), followed by architectural artifacts (15.6%), and a relatively large number of indeterminate artifacts (19.7%).

A total of 65 Food Related faunal remains were recovered. The majority of these consist of 4 clam and 20 oyster shells and 23 large terrestrial mammal bones. The remaining faunal remains are medium terrestrial mammal. Many of the mammal bones exhibit evidence of butchery, with sawing and chopping marks, and the majority consist of long bones. The caprine bones consist of a humerus and foot bones, and the six cattle bones contain a juvenile femur, vertebrae, and tibia. These are all remnants of food use with no evidence of postmortem modification.

The household category consists of a combination of tableware and utilitarian ware. One of the creamware sherds is from a fruit shaped teapot dating 1759–1775; it is the most tightly dated item within this assemblage.

The unit was excavated to a final depth of 4.5’ bs, but the artifact deposit continued and appeared to extend to the east, north, and south.

Other archaeological resources related to the Almshouse discovered during the 2010 project include a stone well, two cisterns, and three wall segments. One of these cisterns clearly dates to the eighteenth century. It was determined through archaeological investigation that the eighteenth century cistern is a remnant of the original structure and was later used as a repository for trash by the workers constructing City Hall.
The second cistern documented in 2010, Feature 2 [2010], first presented as a flagstone path (Image 5.11). Removal of the flagstones revealed them to be sitting atop a circular brick structure.

The cistern feature was an 11.5’ wide circular domed brick structure that had been truncated at its southern end by the modern granite curbed and concrete retaining wall built for City Hall in the 1950s. The northeastern end of the feature had another brick structure, Feature 4 [2010], built atop it. The original nineteenth century rubble retaining wall that was part of the construction for City
Hall, Feature 1 [2010], did not impact Feature 2 [2010]; instead, the wall ended at the eastern edge of the cistern.

The high point of the structure, located at its center, was measured to 1.95’ below datum (bd). Excavation along the perimeter of the feature showed that it was stepped (Images 5.12 and 5.13). The form and construction is consistent with that of a cistern. Cisterns were used to capture and hold rainwater, which could then be used for task work.

Based on its provenience and construction, Feature 2 [2010] pre-dated Feature 1 [2010] (the City Hall retaining wall) and Feature 4 [2010]. Feature 4 [2010] is discussed in the nineteenth century section (Chapter VI). The structure was comprised of unmarked red brick, dating to the late-eighteenth century. The mortar binding the bricks appeared to be made of lime with shell inclusions. Mortar analysis identified it as a sand-lime mortar mix (JBC 2010).

The interior of the cistern contained clean fill soils. However, toward the bottom of the feature, an approximately one inch thick dark organic deposit was exposed. This is likely due to any remaining moisture that had been remnant in the cistern when it was filled. Within this stratum were 11 artifacts. None of the materials provided any definitive temporal data, but the bottle glass had an applied string finish. This applied finishing form was most common between 1830 and 1885 (Society for Historical Archaeology 2012). The cistern could not have been filled prior to 1830; however, this does not provide additional information regarding the construction date.
The base of the cistern consisted of large dark reddish brown sandstone slabs approximately 4” thick set upon clean fill sand (Image 5.14). These stones were faced with mortar on the inner surface of the cistern. The cistern walls were skim-coated with a ½” thick plaster.

Image 5.12: Feature 2 [2010], a brick domed cistern with stepped sides.

Image 5.14: Exposed base of the Feature 2 [2010] cistern shown abutting City Hall at the left edge of the photograph.
The original retaining wall of City Hall extended to the eastern edge of the cistern. Though visibility was limited and partially obscured by modern concrete/cement spillage, the end of the retaining wall appeared to stop before the cistern. The retaining wall showed no evidence of having been impacted by the cistern; it appeared as though the retaining wall had been built up to a point adjacent to the cistern and stopped. The cistern was impacted, however, by the installation of the twentieth-century retaining wall, though it is possible that this could have occurred earlier. Based on measurements, the southern edge of the cistern would have abutted the foundation of City Hall (see Images 5.14 and Image 5.15).

Image 5.15: Plan view of the base of Feature 2 [2010] within the areaway.
There are two possible temporal associations for this cistern. The first is that it is contemporary with the construction of City Hall. Its location would have placed it outside the City Hall kitchen, which was located in the basement. According to Gilbert, some cisterns had outlets within a structure that provided water access from the cistern to another location (Gilbert 2010). However, no direct evidence of this was exposed when the interior walls of City Hall were stripped during renovation. The cistern is also different in size, style, and construction from the other cisterns documented as being constructed contemporaneously with City Hall. The Feature 2 [2010] cistern is significantly smaller, has a steeper dome, uses different construction materials, and is located much closer to City Hall itself. While some of these differences may be the result of differing usages, one would expect the material and construction techniques to have more similarities if they were contemporaneous with the other City Hall cisterns.

The second, and more likely, possibility, is that the Feature 2 [2010] cistern is associated with the eighteenth-century Almshouse. Analysis of construction materials points toward a late-eighteenth century date for this cistern. There is a notation for a new cistern for the Almshouse in the July 1769 minutes of the Common Council (MCC 1675–1776 7:172). It is likely that Feature 2 [2010] was constructed during the last decades of the First Almshouse’s operation and continued to be used during the early years of City Hall.

The second cistern, Feature 33/35 [2010], had a much more complex presentation as it was partially demolished and reused in the early-nineteenth century and beyond. The cistern was only identified following the excavation of two distinct trash deposits. The feature was labeled as Feature 33/35 [2010] for the two deposits.
Feature 35 [2010], the second of the deposits, terminated at the interior base of the eighteenth century cistern (Feature 33/35 [2010]) (Image 5.16). The cistern was mostly demolished, likely beginning with the construction of the original City Hall retaining wall (Feature 1 [2010]) and the later construction of another brick structure (Feature 3 [2010]).

Only one course of stone remained of the cistern’s original construction. The walls of the Feature 33/35 [2010] cistern had been constructed of large reddish sandstone blocks with a sand-based mortar and a thin plaster coating on the interior wall. The base was constructed of slabs of the same stone and a single row of a brick outer rim. Measurements determined the cistern to have had a 9’ diameter.

Feature 33/35 [2010] was stratigraphically complex, having been built upon multiple times. The cistern was the first feature constructed in this vertical location. At some point, the cistern was no longer used for the purpose of holding water and it became a repository for trash. Dating of the trash materials suggest they were deposited after the demolition of the Almshouse and as early as the turn of the nineteenth century. The deposits are discussed in the nineteenth century chapter.
Another eighteenth century feature, Feature 8 [2010], found in this vicinity was a large circular stone shaft with an outside diameter of 8.7’ encountered at approximately 3.1’ bs. Large rectangular slabs of schist/bluestone capped Feature 8 [2010] when it was discovered (see Image 5.17). Upon removal of these capping stones, the shaft was revealed as a structure with 2.5’ thick walls constructed of dry-laid schist and enclosing a 6.2’ diameter circular area.

Feature 8 [2010] was determined to be a well associated with the Almshouse. When City Hall was under construction, the well was filled with soil and capped. At some point a brick drainage system was installed at City Hall and it funneled into the earlier well.
Dateable artifacts from the deepest extent of the well consist of pearlware, creamware, clouded glaze ware(s), and tin glaze ceramic sherds. All of these wares predate the construction of City Hall. The well is likely associated with the earlier Almshouse, but could very well represent an earlier Dutch well that tapped the waters beneath what is now City Hall Park.

Three additional eighteenth-century features were recovered from this vicinity. Three walls are documented within the footprint and beneath the present day areaway of City Hall. Feature 23 [2010] was a 7.2’ long by 1.1’ wide mortared brick wall exposed adjacent to, but at a greater depth than, the City Hall retaining wall, Feature 1 [2010] (see Maps 5.05 and 5.06). Feature 23 [2010] was uncovered at 5.4’ bd. The east-west oriented wall was three courses deep, likely having been reduced to this level during the construction of Feature 1 [2010].
The south, west, and east ends of the wall appear to have been damaged, but the southwestern portion of the wall was intact and finished, indicating that the original width of the wall was 1.1’.

The southwestern area also appeared to have been a corner, though its proximity to the foundation of City Hall inhibited further investigation. The walls eastern end had already been demolished. The bricks used in the construction were unmarked and had several inclusions, appearing to date to the eighteenth century.
Feature 25 [2010] presented itself as a segment of stone wall located beneath Feature 22 [2010], a former doorway to the basement kitchen of City Hall. It was discovered during the excavation of the interior area of Feature 22 [2010].

Feature 25 [2010] extended further east than the boundary of Feature 22 [2010] and the westernmost edge of Feature 25 [2010] intersects with the west wall of Feature 22 [2010] (Image 5.18). The easternmost end of the feature appears to turn northward beneath the retaining wall, forming a corner. This segment of stone wall is a remnant of a larger wall that was partially destroyed during the construction of City Hall and Feature 22 [2010], which sits directly above it. The remaining segment of wall was exposed at 6.15’ bd and extended to 7.25’ bd. When initially uncovered, it was thought to be a continuation of Feature 23 [2010]. However, the structural composition and materials negated this original working hypothesis.

Feature 25 [2010], or what remains of the wall, was constructed of three to four courses of large angular flat stones with no footer. In contrast, Feature 23 [2010] was constructed of brick and sat atop a stone footer. The stones used for the footing at Feature 23 [2010] are not the same stones as those of Feature 25 [2010]. Additionally, there was no evidence of brick having been built atop Feature 25 [2010].

Feature 26 [2010] was a wall remnant visible in the profile beneath City Hall’s retaining wall, Feature 1 [2010] (Map 5.11). Feature 26 [2010] presented as a disturbed 14’ length of a stone and rubble wall approximately 1’ below the base of the retaining wall at approximately 6’ bd.
All three of these wall features pre-date City Hall. Their location and chronology associated them with the Almshouse.

Image 5.18: Feature 25 was located beneath Feature 22 and represents an earlier construction.
Map 5.11: Profile of Feature 26.
According to historic documents, several structures or features were associated with the Almshouse (Table 5.02). At least ten have been located archaeologically: the wall and deposits documented in 1989; the deposit recovered beneath the City Hall basement in 2010; the three walls documented in 2010; the well and two cisterns documented in 2010; and the impacted deposit recovered alongside the east wall of City Hall (Table 5.03). Map 5.12 shows these features within the eighteenth century Revolutionary period landscape.

Removing the modern-day footprint from the CHARM provides a different perspective of the eighteenth century archaeological resources. Interestingly, with the exception of the burial ground, the Almshouse resources are relatively contained. The cisterns are immediately outside the rear of the building in the area of the kitchen. The Almshouse kitchen was said to be in the east wing. The well is also on the side of the kitchen, though a bit further to the east and north of the building.

The resources exposed beneath the basement of City Hall are located within, and beneath, what would have been the east wing of the Almshouse. The resources discovered in 1989 appear to fall directly within a historically-referenced exterior building.

The CHARM also highlights the structural density of the area. The Almshouse property is immediately adjacent to the eastern end of the “U” shaped barracks complex. It also becomes apparent that there was limited open space in the area. However, the mapping does make clear that large-scale trash deposition was occurring within the area of the Almshouse burying ground. Whether this is simply the result of practicality, or of different ideas concerning death and the
burial of the indigent, is an avenue for further study. Field notes do not provide adequate detail to
definitively determine to what extent the burials cut into the trash deposit.
Map 5.12: CHARM layer depicting Almshouse related archaeological resources within the eighteenth century landscape.
Table 5.02: Archaeological resources associated with the Almshouse

<table>
<thead>
<tr>
<th>Resource</th>
<th>Excavation</th>
<th>Feature ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brownstone wall</td>
<td>1989</td>
<td></td>
</tr>
<tr>
<td>Artifact deposit</td>
<td>1989</td>
<td></td>
</tr>
<tr>
<td>Artifact deposit</td>
<td>2010</td>
<td>Room 8C</td>
</tr>
<tr>
<td>Wall</td>
<td>2010</td>
<td>23</td>
</tr>
<tr>
<td>Wall</td>
<td>2010</td>
<td>25</td>
</tr>
<tr>
<td>Wall</td>
<td>2010</td>
<td>26</td>
</tr>
<tr>
<td>Artifact deposit</td>
<td>2010</td>
<td></td>
</tr>
<tr>
<td>Well</td>
<td>2010</td>
<td>8</td>
</tr>
<tr>
<td>Cistern</td>
<td>2010</td>
<td>2</td>
</tr>
<tr>
<td>Cistern</td>
<td>2010</td>
<td>33/35</td>
</tr>
</tbody>
</table>

Table 5.03: Historic structures or Features from Hunter 1993.

<table>
<thead>
<tr>
<th>Structure/Feature</th>
<th>Begin Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Almshouse</td>
<td>1735</td>
<td>1797</td>
</tr>
<tr>
<td>First Almshouse and Bridewell Burial Ground</td>
<td>1785</td>
<td>1796</td>
</tr>
<tr>
<td>First Almshouse Burial Ground</td>
<td>1757</td>
<td>1785</td>
</tr>
<tr>
<td>First Almshouse Burial Ground Fence</td>
<td>1757</td>
<td></td>
</tr>
<tr>
<td>First Almshouse Cistern (#1)</td>
<td>1749</td>
<td>1797</td>
</tr>
<tr>
<td>First Almshouse Cistern (#2)</td>
<td>1749</td>
<td>1797</td>
</tr>
<tr>
<td>First Almshouse Fence</td>
<td>1740</td>
<td></td>
</tr>
<tr>
<td>First Almshouse Garden</td>
<td>1735</td>
<td></td>
</tr>
<tr>
<td>First Almshouse Hospital</td>
<td>1739</td>
<td>1787</td>
</tr>
<tr>
<td>First Almshouse Kitchen</td>
<td>1736</td>
<td>1797</td>
</tr>
<tr>
<td>First Almshouse Northern Addition</td>
<td>1735</td>
<td>1797</td>
</tr>
<tr>
<td>First Almshouse Outbuilding #1</td>
<td>1735</td>
<td>1797</td>
</tr>
<tr>
<td>First Almshouse Outbuilding #2</td>
<td>1775</td>
<td>1797</td>
</tr>
<tr>
<td>First Almshouse Oven</td>
<td>1736</td>
<td>1797</td>
</tr>
<tr>
<td>First Almshouse Stable (#1)</td>
<td>1736</td>
<td>1795</td>
</tr>
<tr>
<td>First Almshouse Stable (#2)</td>
<td>1786</td>
<td>1795</td>
</tr>
<tr>
<td>First Almshouse Stable (#3)</td>
<td>1795</td>
<td></td>
</tr>
<tr>
<td>First Almshouse Storehouse</td>
<td>1786</td>
<td>1797</td>
</tr>
<tr>
<td>First Almshouse Vault</td>
<td>1753</td>
<td></td>
</tr>
<tr>
<td>First Almshouse Washhouse</td>
<td>1736</td>
<td>1797</td>
</tr>
<tr>
<td>First Almshouse Washhouse Cistern</td>
<td>1769</td>
<td>1797</td>
</tr>
<tr>
<td>First Almshouse Washhouse Shed</td>
<td>1769</td>
<td>1797</td>
</tr>
<tr>
<td>First Almshouse Well</td>
<td>1790</td>
<td>1797</td>
</tr>
<tr>
<td>First Almshouse Yard</td>
<td>1735</td>
<td>1797</td>
</tr>
</tbody>
</table>
The Gaol

According to historic and reconstructed maps, the Gaol was located approximately 160’ east of, and was one of two prisons flanking, the Almshouse. While there has been no definitive identification of a structural remnant of the Gaol, a stone wall, Feature 79 [1999], was identified within the general footprint of the historic structure (see Maps 5.05 and 5.06). To clarify the position of the Gaol on the comprehensive City Hall Park Historic and Archaeological Resources Map (CHARM), several factors were considered. The Gaol building remained extant until 1903, having been repurposed to serve as the Hall of Records in the nineteenth century. As a result of its long usage, the Gaol appears on several maps and atlases alongside City Hall, including the Hunter Research map, which has served as a guide for many archaeological projects. The veracity of these maps and atlases were checked against known measurements of City Hall and none of them were identical. As a result, the various measurements, generally all within a 10’ range, were averaged.

Five features were identified in the vicinity of the Gaol during the 1999 project. The above-mentioned Feature 79 [1999] is only documented as a notation in PES field log. An outline of what may be Feature 79 appears on the PES map, but there were no field notes or drawings. Feature 59 [1999] was another dry laid stone wall. The wall was composed of two courses of north-south running large cobbles, some flat schist-like stones, and brick. It did not have many artifacts associated with it (n=79). Among the artifacts were bone, liquor bottle glass (4 pieces), window glass (2 pieces), ceramic, shell, and a brick sample taken from the wall. Almost half the materials are shell (39 pieces), mostly clamshells. The ceramic remains mostly consist of creamware, which generally dates between 1762 and 1820. The most recent pottery type were two sherds of
pearlware, which has a date range of 1775-1840. The function of this feature or its relation to the other features in the vicinity is undetermined.

A group of three artifact deposits was excavated in horizontal succession near the western edge of the Gaol (Map 5.13). Feature 91 [1999] was classified during excavation as a dense concentration of large mammal bone and shell that contained a significant artifact density. Feature 91 was situated alongside the Gaol between Features 82 and 92 [1999] and was determined to be part of a larger feature group that included Features 82 and 92 [1999]. Feature 92 [1999] was labeled a refuse pit that was initially recognized as surface scatter and artifact concentration during backhoe excavation (PES 1999). Once identified, the feature was manually excavated. Feature 92 [1999] contained a dense layer of oyster shell interspersed with animal bone and artifacts.

In what appears to be a standard pattern in the eighteenth-century deposits, the majority of the Feature 92 [1999] assemblage is comprised of household artifacts. Faunal and architectural are the next two biggest categories. Table 5.04 and Figure 5.02 provide a breakdown of artifacts by functional category and percent contribution.

The household artifacts are largely ceramic sherds (79.4%) and, of those, 74.8% are creamware sherds dating to 1762-1820. The ceramic sherds are heavily fragmented. Overall the assemblage is comparable to others on site, with one notable difference: it contains a significantly greater percentage of smoking pipe stems and bowls. Table 5.05 is a comparison of the percentage of smoking pipes from the largest eighteenth century features.
Map 5.13: CHARM layer detail of Gaol area in the eighteenth century.
Table 5.04: Features 82-91-92 [1999] Artifact counts by functional category.

<table>
<thead>
<tr>
<th>FUNCTIONAL GROUP</th>
<th>ARTIFACT COUNT</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>1</td>
<td>.01%</td>
</tr>
<tr>
<td>Architectural</td>
<td>891</td>
<td>15.9%</td>
</tr>
<tr>
<td>Arms</td>
<td>2</td>
<td>.03%</td>
</tr>
<tr>
<td>Clothing</td>
<td>21</td>
<td>.37%</td>
</tr>
<tr>
<td>Faunal</td>
<td>1082</td>
<td>19.3%</td>
</tr>
<tr>
<td>Fuel</td>
<td>123</td>
<td>2.19%</td>
</tr>
<tr>
<td>Furnishings</td>
<td>2</td>
<td>.03%</td>
</tr>
<tr>
<td>Household</td>
<td>2501</td>
<td>44.7%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>227</td>
<td>4%</td>
</tr>
<tr>
<td>Lighting</td>
<td>6</td>
<td>.1%</td>
</tr>
<tr>
<td>Manufacture</td>
<td>15</td>
<td>.26%</td>
</tr>
<tr>
<td>Medical</td>
<td>38</td>
<td>.67%</td>
</tr>
<tr>
<td>Personal</td>
<td>681</td>
<td>12.17%</td>
</tr>
<tr>
<td>Sanitary</td>
<td>1</td>
<td>.01%</td>
</tr>
<tr>
<td>Toy/Recreation</td>
<td>4</td>
<td>.07%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5595</strong></td>
<td></td>
</tr>
</tbody>
</table>

Figure 5.02: Features 82-91-92 Functional category percent contribution.
Table 5.05: Percent contributions of smoking Pipes to the larger eighteenth century assemblages.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Number of smoking pipes</th>
<th>Percentage of Whole</th>
</tr>
</thead>
<tbody>
<tr>
<td>82-91-92 [1999]</td>
<td>678</td>
<td>12%</td>
</tr>
<tr>
<td>87/88/99 [1999]</td>
<td>528</td>
<td>2.4%</td>
</tr>
<tr>
<td>55 [1999]</td>
<td>230</td>
<td>2.9%</td>
</tr>
<tr>
<td>163 [1999]</td>
<td>222</td>
<td>3.2%</td>
</tr>
<tr>
<td>84 [1999]</td>
<td>174</td>
<td>6%</td>
</tr>
</tbody>
</table>

While the area around Feature 92 [1999] appears to have been used for refuse disposal, it was on a significantly smaller scale than other areas of the property. Features 82-91-92 [1999] were identified in field notes as a midden. However, the deposit seems to be more akin to a primary sheet deposit with several years of accumulation. For the purposes of this interpretation, a midden is defined as a deliberately dug area used for trash deposition. In contrast, a sheet deposit is defined as an accumulated scatter of trash debris surrounding an area, such as a building. It is also characterized by relatively thin compact strata. However, there is no stratigraphic information or profile available and the assessment is based on limited field notes.

The location of Features 82-91-92 [1999] places them outside the western edge of the Gaol. The materials in these features are highly fragmented and appear to have been subjected to significant and repeated compactions, consistent with sheet deposits that would have been trod upon regularly. However, this does not appear to account for the greater number of smoking pipes as compared to other features. The compaction seems to have mostly affected the pottery and glass in the form of fragmentation.
Taking the higher percentage of smoking paraphernalia into account suggests that this area may have been favored for smoking. Smoking itself is not an indicator of class, as pipes and tobacco were readily available to all economic strata (Baugher 2001:191). The TPQ for the assemblage is 1780, based on the presence of Edgeware style pearlware sherds. Analysis of dateable items places the assemblage within the range of occupation for the Gaol.

*The Bridewell*

The Bridewell was the second prison on the Common, located west of the Almshouse. During the 1999 project, a mortared stone wall with associated brick and plaster rubble, Feature 161 [1999], was exposed in the vicinity of the Bridewell. However, there were minimal notes and no scaled drawings.

During the 2010 project, excavation exposed significant and substantial architectural features, as well as a significant material deposit in the vicinity of the Bridewell (see Maps 5.05 and 5.06). Initially, the architectural features included a wide staggered stone structure, believed to be a base for stairs. Archaeological excavation expanded to determine the extent of the stone structure resulted in the discovery of additional features.

In total, seven features were identified during excavation in the area around the Bridewell. The first feature exposed was Feature 36 [2010], a circular brick shaft feature dating to the late nineteenth century. This feature postdates Features 37 [2010], 39 [2010], 41 [2010], and 42 [2010] and clearly cuts into Features 37 [2010], 39 [2010], and 41 [2010], which were observed on either side of Feature 36 [2010]. Features 38 [2010] and 40 [2010], exposed in the west profile of the
excavation area, are of an indeterminant association as they were not fully excavated and there was not enough information to form any hypotheses. However, it does appear that Feature 40 could be associated with the Bridewell on account of its provenience.

Initially, three rows of brownstone blocks in a north-south orientation, Feature 37 [2010], was exposed in the Bridewell area. The stones appeared to be mortared and were overlapping at the edges, having a stepped appearance. Each row of stone was at a different elevation (Image 5.19).

Image 5.19: Stones that initially appeared to be collapsed steps (Feature 37 [2010]).
The feature appeared to be the base of steps rising east to west. The lowest “step” in the east was exposed at a depth of 5.2’ bs and had a dressed front face; the back face was irregular. The upper “steps” were more uniform. The feature was noted as being in the approximate location of the northeastern end of the Bridewell (Map 5.14). Additionally, the orientation and materials of the feature were consistent with lithographic images, historical descriptions, and the date of the Bridewell (Image 5.20). The Bridewell was a Georgian style stone structure erected in 1775 and demolished in 1838.

To facilitate the needs of the project, a portion of Feature 37 [2010] required removal and a controlled deconstruction was performed under archaeological supervision. Initially, eight large stones were removed and further excavation along the eastern face revealed an additional 4’ depth of cut brownstone blocks. Only one course of stone was present at the western end of the feature. Beneath these western courses of stone, a mortared brick arc was exposed. Continued excavation suggested that what initially appeared to be stairs was likely a collapsed wall.
Map 5.14: The 1811 Commissioners Map showing the proximity of City Hall and the Bridewell.
The brick arc, Feature 39 [2010], was exposed at 4.9’ bs (Image 5.21). The mortared brick structure abutted the eastern wall of Feature 37 [2010]. It was constructed of alternating rows of two courses of horizontal brick and one course of vertical brick. Feature 39 was initially thought to be a drain, but this was ruled out when further excavation did not reveal a bottom. Photographing the interior through a less than 1’ gap in the brick showed the arc extended both north and west. Beneath the brick arc was a considerable amount of brick and mortar demolition fill.

Further excavation—including the removal of a portion of the brick arc—determined that the brick and mortar demolition fill was an *in situ* feature. Its location would have placed it inside and part of the east end of the Bridewell. The purpose of the brick arc is unclear and its full extent was not excavated due to construction constraints. Of the portion that was exposed and documented, the curvature of the feature did not appear significantly pronounced, suggesting it may have been a support or vaulted ceiling of the Bridewell basement. However, the presence of the brick and
mortar demolition fill is problematic in that it should not be present if the structure had collapsed in on itself as part of the demolition process, as suggested by Feature 37 [2010].

During the removal of additional portions of Feature 37 [2010] and Feature 39 [2010], a dry laid schist foundation wall on a north-south orientation was exposed immediately beneath the east wall of Feature 37 [2010] (Map 5.15). Feature 41 [2010] (Image 5.22) was initially exposed as two courses of the wall. The top course measured 1.3’ wide and the second course measured 2’ wide. Continued excavation revealed that this foundation wall increased in width as its depth increased (Image 5.23).
Excavation of this feature was limited to an approximate 7’ x 6’ area bounded by a wooden shoring box required for construction activity accessibility. The required excavation depth would extend beyond 15’ bs and require removal of the feature within the boundary.

The soil excavated along the exterior (east) side of the foundation wall consisted of olive brown colored (2.5YR 5/6) fill sand. This soil extended approximately 1’ from the feature wall, representing a builder’s trench. The trench cut into a light brown (7.5YR 5/6) natural sandy subsoil. The west side of the feature, the interior, contained a continuation of the brick and mortar demolition fill observed immediately beneath the brick arc (Feature 39 [2010]). This demolition fill extended to 9.2’ bs. Beneath the demolition fill, a midden deposit (Feature 42 [2010]) was exposed extending to 12.2’ bs.

The foundation wall stretched to a final depth of 13.5’ bs and had a bottom width of 5’. Feature 41 [2010] is part of the Bridewell foundation. The foundation was built for substantial structural support and its expanding width is representative of a load-bearing mechanism for the large stone masonry structure. The soil at the base of the foundation consisted of a sandy silty loam (10YR 5/1) consistent with the natural subsoil of this area.
Map 5.15: Plan view of Feature 41 following the partial removal of Features 37 [2010] and 39 [2010].
Features 37 [2010], 39 [2010] 41 [2010], and 42 [2010] are all remnants of the eighteenth-century Bridewell. This set of features included a stepped formation of brownstone (Feature 37 [2010]) that may have once been stairs or a collapsed wall; a brick arc (Feature 39 [2010]) that may have been part of a vault or some form of support structure within the Bridewell basement; the substantial stone foundation wall of the Bridewell (Feature 41 [2010]); and a small portion of a primary deposit from within the basement level of the Bridewell (Feature 42 [2010]). The building
materials of the features are consistent with historic descriptions of the Bridewell structure and the assemblage composition and timeframe is consistent with the demolition date of the Bridewell.

The Bridewell was constructed in 1775 by architect Theophilus Hardenbrook (New York State Legislature 1910:394). It initially served as a debtors’ prison and a house of reform for those convicted of lesser crimes. During the Revolutionary War, the British used the prison to house American prisoners of war. After the war, returned to a “correctional” facility.

The Bridewell remained in use as a prison until 1838, when it was demolished. It is described as having been a large masonry structure with a three-story central wing. The side wings were two stories each. The Bridewell sat atop a raised basement, each section of which had several bays. It measured 39’ x 146’. Inmates used the property surrounding the Bridewell for a variety of activities, including two forges in which prisoners made nails.

Several historic lithographs depicting the period between 1811–1840 present City Hall and the Bridewell as being in line with one another, their fronts being along the same axis. Contraryily, the 1811 commissioners’ plan (see Map 5.14) and the Mangin-Goerck plan (1834) show the Bridewell situated farther north. These maps depict the front of the Bridewell almost in line with the rear of City Hall. A color lithograph by John Hill (1826) also visually depicts the Bridewell set back in relation to City Hall (Stokes 1915-1928) (Image 5.24).
If one considers the role of City Hall, and its intent as a statement of the City within the newly minted City Hall Park, it is more likely that the commissioners’ plan, the Mangin-Goerck plan, and the Hill picture are accurate. City Hall, a substantially larger building that the Gaol and Bridewell, should be prominently presented along the viewshed. This would be in keeping with traditional panoptic placement of structures associated with government.

The Feature 42 [2010] assemblage represents a primary deposit of materials from the period that the Bridewell was shut down and demolished, circa 1838. The date range of the assemblage is 1775–1843 and the TPQ 1835. These dates are consistent with the operation dates of the Bridewell. Although dating into the nineteenth century, the assemblage is discussed here for narrative flow.

The materials in the Feature 42 [2010] assemblage may be the discarded remnants of the last inmates of the Bridewell. Inmates in the Bridewell were mostly the poor, vagrants, disorderly persons, and prostitutes. Inmates included men, women, and children as young as 12. A 12-year-old boy, Thomas H. C., who was charged with stealing in 1824, had already been sentenced to the Bridewell twice before (Society for the Reformation of Juvenile Delinquents 1832). The commissioners of the Almshouse and Bridewell (and by default, the city) provided minimal support for the inmates. Inmates were expected to pay for their own food, clothing, and fuel (Burrows and Wallace 1999: 365).

Some of the materials may also represent the keeper of the Bridewell who lived on the premises (MCC 1784 – 1831: various entries).

The assemblage has a “put together” character, with a variety in types and quality. In general, the pottery and glass are low-cost items exhibiting extensive use-wear (Chrysalis and URS 2013). Table 5.06 presents a breakdown of the assemblage. Faunal remains dominate the assemblage, a high percentage of which were identifiable to the species level. The major species is cattle, particularly leg bones. Several of these exhibit evidence of sawing or chopping. The second largest category is household items.
Table 5.06: Feature 42, artifact count by functional group.

<table>
<thead>
<tr>
<th>FUNCTIONAL GROUP</th>
<th>ARTIFACT COUNT</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>1</td>
<td>.1%</td>
</tr>
<tr>
<td>Architectural</td>
<td>65</td>
<td>6.5%</td>
</tr>
<tr>
<td>Food Related</td>
<td>603</td>
<td>60.8%</td>
</tr>
<tr>
<td>Household</td>
<td>263</td>
<td>26.5%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>11</td>
<td>1.1%</td>
</tr>
<tr>
<td>Lighting</td>
<td>5</td>
<td>.5%</td>
</tr>
<tr>
<td>Medical</td>
<td>3</td>
<td>.3%</td>
</tr>
<tr>
<td>Ornament</td>
<td>1</td>
<td>.1%</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>.2%</td>
</tr>
<tr>
<td>Personal</td>
<td>22</td>
<td>2.21%</td>
</tr>
<tr>
<td>Sanitary</td>
<td>11</td>
<td>1.1%</td>
</tr>
<tr>
<td>Toy/Recreational</td>
<td>4</td>
<td>.4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>991</strong></td>
<td></td>
</tr>
</tbody>
</table>

Two artifacts in particular speak of life at the Bridewell: a modified tumbler and a pearlware figurine. One of the ways institutional life manifests itself archaeologically is through modified objects and/or spiritual items. These artifacts are a direct response to the stresses of confinement that were amplified, in this instance, by overcrowded, deplorable conditions (Kaktins 2012; Warfel 2009; Ferguson 1992). The tumbler has a double “x” incised on its base, which may have been marked to denote ownership or for some other ritual purpose (Image 5.25). The other artifact is the base of a burned pearlware figurine that appears to represent a woman. This could have belonged to the keeper and his family, or it may have been a token belonging to an inmate.

Of all the artifacts from this assemblage, the modified tumbler has the greatest potential to provide insight into the private life of the individual who owned or used it. It is an undecorated glass tumbler with a simple “X” or cross incised in the center of the base. Not only did the user intentionally alter this object, but the “X” was placed in the center of the blow pipe scar -- a hollow circle remaining as a byproduct of the glass-blowing process (Jones 1986). It has been speculated
that the cross or “X” inside a circle is a basic, though powerful, cosmological symbol (Image 5.26).

It is generally accepted that these are religious in nature and that the symbol represents a cosmogram in some traditional African religions, with one line of the cross representing the division between the worlds of the dead and the living (Ferguson 1992). Identical symbols are found inscribed on artifacts from archaeological sites once inhabited by African Americans, indicating that those of African descent living in America were utilizing similar symbols (Ferguson 1992:111; Schroedl and Ahlman 2002; Ricciardi 2004). The crosses tend to be inscribed on the bases of vessels, which are themselves circular, or hollow. Thus, an inscribed circle may not always be necessary if an existing one is present, as with the tumbler and many other examples. Ferguson argues that the more circles the better, which may be why the cross or “X” on the tumbler was essentially inscribed within two: the blow pipe pontil scar and the circular base. These inscribed vessels may be related to the manufacture of traditional Kongo medicines, or nkisi, and would have held objects or materials of power (Ferguson 1992:114; Wilkie 1997:98). Modern-day Voodoo maintains similar symbols, such as the Petro symbol (Lampe 1982:72), which resembles that inscribed on the tumbler, and when inscribed upon an object or the ground will aid in the invoking of a Voodoo god, or Loa.

The tumbler’s association with the Bridewell is intriguing. It is no coincidence that the majority of these incised artifacts are associated with Africans and African Americans and the removal of their freedom. Slave dwellings in the south are the most common location for such magic objects (Ferguson 1992). Similarly, corn cobs placed in formation were documented at the Hendrick I. Lott House in Brooklyn. These were found beneath floorboards in a garret space believed to house enslaved persons (Bankoff, Ricciardi and Loorya 2001 and Ricciardi 2004).
Image 5.25: Image of tumbler base with incised “X” (FS 477.7).

Image 5.26: Example of the traditional cosmogram.
Fragments of two children’s objects were also recovered from this feature. Both examples are partial miniature pearlware children’s plates with printed motifs. These few sherds are a testament to the children that lived, worked, and perhaps played on the site. Period documents state that in 1803, the Common Council ordered the construction of a small school adjacent to the Bridewell for the purpose of educating the children living in the neighboring Almshouse. By 1807 the school was in place (MCC 1784–1831 4:363, 394). Given the proximity of the school to the Bridewell, it is not improbable that these children’s plates would be deposited in this feature.

Beginning in the eighteenth century, children were encouraged to mimic adults with their toys and were given miniature versions of adult items so they could “play grownup” and define their gender roles early in life (Feister 2009). The end result of this mindset was that little girls were given dolls, small tea sets, and kitchenwares, while boys played with items such as miniature pocketknives, watches, and novelty white clay pipes (Zorn 1892). There are two kinds of toy ceramics: those big enough that they could actually be used by children at the table and to prepare “make believe” meals, and those which were even smaller and designed to be “used” by their toys (i.e., dolls).

The four miniature ceramic fragments from this feature fall into the first category. The printed motifs on two other plates serve another purpose, as well; both exhibit “educational” motifs and may have served to teach boys and girls morals. The first sherd is from a “Limerick Plate,” dating between 1818 and 1830 (Godden 1994 and Miller et al. 2000). Although only a portion of the brown-printed decoration remains on this sherd, the entire plate would have read:
There was an old woman of Leeds, who spent all of her time in good deeds; She worked for the poor, Till her fingers were sore, this pious old woman of Leeds.

The second plate is printed in blue with a Spode maker’s mark dating it from 1807 (Millet et al. 2000) to 1829 (Godden 1994), and likely depicts a biblical scene. The poorest children of New York City likely ate from these plates, the hope being that while they did so they would learn a catchy phrase about a kindly and moral woman or ponder an important story from the Bible.

Discovery of the Bridewell marks the first time within City Hall Park that the remnants of an eighteenth-century structure have been identified with almost 100% certainty. The opportunity remains to better define this discovery. Those sentenced to the Bridewell were a desperately poor subset of the population at a time when little distinction was made between poor and being a petty criminal. These persons are traditionally underrepresented in the historical record. The potential for further recovery of Feature 42 [2010] and other artifact deposits that can be definitively associated with the Bridewell would allow for the opportunity to learn more about the activities, diet, and general lifeways of these residents.

Trash Deposition and the Almshouse Cemetery

There have been several trash deposits documented and recovered within City Hall Park. The overwhelming majority of them have been in the East Field and the majority of those are dated to the eighteenth century. Some of these deposits were excavated as separate episodes, but post-excavation analysis identifies them as part of one larger deposition area.
The three largest eighteenth century trash depositions in the East Field area are Features 84 [1999], 55 [1999] and 88 [1999] (see Maps 5.05 and 5.06).

Feature 84 [1999] was a large trash feature located northeast of the upper barracks, in the northeastern corner of the park. It was the only trash feature identified in this area and during the eighteenth century the presence of the barracks buildings served as a physical divider from the southern portion of the Common.

Field notes suggest that the feature was a series of small pits, but note that it was excavated as a single pit (PES 1999). The feature contained three strata, noted post-excavation (Map 5.16). Stratum A contained a high density of artifacts including kiln furniture and locally made stoneware vessels. This stratum cut into two earlier strata, Stratum B on the south and Stratum C on the north. Excavation methodology forced the analysis of the three strata to be undertaken as a single unit.

Household artifacts dominate the Feature 84 [1999] assemblage, followed by architectural materials (Table 5.07).
Map 5.16: Feature 84 [1999] west profile.

Table 5.07: Feature 84 [1999] artifact counts by functional group.

<table>
<thead>
<tr>
<th>FUNCTIONAL GROUP</th>
<th>ARTIFACT COUNT</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>2</td>
<td>.07%</td>
</tr>
<tr>
<td>Architectural</td>
<td>682</td>
<td>25.3%</td>
</tr>
<tr>
<td>Arms</td>
<td>3</td>
<td>.11%</td>
</tr>
<tr>
<td>Clothing</td>
<td>20</td>
<td>.74%</td>
</tr>
<tr>
<td>Communication</td>
<td>1</td>
<td>.04%</td>
</tr>
<tr>
<td>Faunal</td>
<td>316</td>
<td>11.7%</td>
</tr>
<tr>
<td>Fuel</td>
<td>6</td>
<td>.22%</td>
</tr>
<tr>
<td>Funerary</td>
<td>1</td>
<td>.04%</td>
</tr>
<tr>
<td>Hardware</td>
<td>2</td>
<td>.07%</td>
</tr>
<tr>
<td>Household</td>
<td>1236</td>
<td>45.9%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>208</td>
<td>7.72%</td>
</tr>
<tr>
<td>Lighting</td>
<td>14</td>
<td>.51%</td>
</tr>
<tr>
<td>Manufacture</td>
<td>27</td>
<td>1%</td>
</tr>
<tr>
<td>Medical</td>
<td>4</td>
<td>.15%</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>.04%</td>
</tr>
<tr>
<td>Personal</td>
<td>175</td>
<td>6.49%</td>
</tr>
<tr>
<td>Tools &amp; Equipment</td>
<td>3</td>
<td>.11%</td>
</tr>
<tr>
<td>Total</td>
<td>2694</td>
<td></td>
</tr>
</tbody>
</table>
Of the ceramic wares recovered, 54% of the material is stoneware, and of the stoneware, 75% is American-made gray salt-glaze stoneware locally produced by the nearby Crolius and Remmey pottery. It should be noted that much of this percentage is waster material (i.e. stoneware kiln wasters). There also appear to be bowls or basins that may be related to the sanitary category.

There are a number of coarse American redwares, such as American slipware and black glazed redware, present. Coarse wares, such as Staffordshire style slipwares, are found in higher percentage than the more refined earthenwares, such as creamware. Expensive imported Chinese porcelain makes up only 6% of the total ceramics.

Distinct military objects are relatively absent from the assemblage despite its proximity to the Upper Barracks. Three Arms related objects were recovered: two gunflints and a lead musket ball. However, these cannot be definitively ascribed to the military occupants of the Common.

The TPQ for Feature 84 [1999] is 1780 based on a single pearlware sherd. However, this is likely an intrusive item or has been misidentified. The MCD for this feature is 1744 and the pipe stem analysis provided a 1755 date.

Feature 84 [1999] was impacted by a nineteenth century construction that bisected the feature. Feature 89 [1999], a rounded stone feature, cut through the eastern portion of Feature 84 [1999] and formed part of the foundation for the nineteenth century Rotunda (Map 5.17). Despite this disturbance, it is clear that Feature 84 [1999] is a sizable mid-eighteenth century primary deposit.
As noted above and according to map analysis, the area was located north of the Upper Barracks, which was built in 1757. The placement of the barracks would have provided a physical separation between Feature 84 [1999] and the remainder of the site. If Feature 84 [1999] were related to any of the populations inhabiting the Common, it would probably be the soldiers in the barracks. However, the feature clearly contains intrusive materials from local manufacture. Though dating suggests that the Feature 84 [1999] assemblage is contemporaneous with the Upper Barracks, it is also a period when potters were located immediately north of the Common. There are no unique identifiers present to definitively associate this assemblage with the barracks. There is a significant amount of pottery waste material from the nearby local potteries, however, making this the more likely association for the deposit. Feature 84 [1999] is representative of the theorized off-site dumping that occurred on the Common.

Map 5.17: Plan view of Feature 84 [1999] with the intrusive Feature 89 [1999].
South of the barracks, the east and southeastern portion of the current property contain multiple trash depositions (Map 5.18). This is where the majority of the artifacts were recovered during the 1999 project. During excavation in 1999, Features 71, 85, 86, 87, 88, 99, 156, 161, and 163 were all identified as middens located to the east of the eighteenth-century Almshouse and both north and south of the Gaol.

The location of these features with reference to eighteenth century structures identifies two arbitrary areas divided by the presence of the Gaol. Area 1 is north of the Gaol and contains Features 71 [1999], 85/86 [1999], 87 [1999], 88 [1999], 90 [1999], 99 [1999], 156 [1999] and 163 [1999]. All these features, except for Features 85/86 and 90, are grouped together in the same location as the Almshouse burial ground. Area 2 is south of the Gaol and contains three distinct deposits including Features 55 [1999], 104 [1999] and 182 [1999].
Map 5.18: CHARM layer depicting eighteenth century archaeological features in the eastern half of the eighteen century Common.
Feature 87/88/99 [1999] is a distinctly large eighteenth century trash midden feature. Excavated separately as Features 87 [1999], 87-88 [1999], 88 [1999] and 99 [1999], post-excavation stratigraphic analysis identified these to all be part of a single larger stratified midden deposit. The deposit was located at the east end of the Almshouse burial ground (Image 5.27). Map 5.19 shows multiple burial features in this area and within the footprint of the midden feature(s). Feature 87 [1999], the first to be exposed within this area, was a trash midden feature with three clearly defined strata. However, the stratigraphy was only observed in the post-excavation profile. Feature 87/88 [1999] was a continuation of Feature 87 [1999] as it was observed in the field to have intruded upon Feature 88 [1999]. Feature 87/88 [1999] was excavated in a single episode. PES identified Feature 88 [1999] as a “trash heap”, which was completely excavated in arbitrary levels within the observed stratigraphy with the exception of one stratum. There are limited notes for Feature 99 [1999]; it is described in one note as a “lower pit adjacent to F87” (PES field notes 1998-1999), however, this is contrary to field drawings.

These features spanned a 15’ area and, based on stratigraphic analysis, they are part of a large trash disposal area within the northeastern corner of the eighteenth century property and the burial ground south of the Upper Barracks. Though stratigraphic analysis and an attempted reconstruction of PES field notes only allow for the definitive association between Features 87 [1999], 87_88 [1999], 88 [1999] and 99 [1999] (Map 5.20), it is highly likely that adjacent features, 156 [1999] and 163 [1999], are also part of this deposition area or complex.
The reconstructed stratigraphic profile and various field notes were able to identify what appear to be four distinct deposition episodes. The majority of the total assemblage comes from Stratum 88A. Table 5.08 provides the artifact count by deposition episode and Map 5.20 displays the reconstructed stratigraphic levels.

Image 5.27: Almshouse burial ground area excavation, vicinity of Feature 88.
Table 5.08: Artifact Totals per Reconstruction of Stratigraphic Levels, or deposition episodes for Features 87, 88, 99.

<table>
<thead>
<tr>
<th>STRATUM</th>
<th>TOTAL # ARTIFACTS</th>
<th>FAUNAL</th>
<th>NON-FAUNAL</th>
<th>TPQ</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>F87</td>
<td>5260</td>
<td>2924</td>
<td>2336</td>
<td>1775</td>
<td></td>
</tr>
<tr>
<td>88A</td>
<td>12778</td>
<td>4619</td>
<td>8159</td>
<td>1765</td>
<td>Faunal is 65% shell</td>
</tr>
<tr>
<td>88A-1</td>
<td>1480</td>
<td>238</td>
<td>242</td>
<td>1762</td>
<td>Only 1 bone, all shell</td>
</tr>
<tr>
<td>88B</td>
<td>1002</td>
<td>354</td>
<td>648</td>
<td>1762</td>
<td></td>
</tr>
<tr>
<td>88B-2</td>
<td>151</td>
<td>83</td>
<td>98</td>
<td>1762</td>
<td></td>
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<tr>
<td>88C</td>
<td>1578</td>
<td>12</td>
<td>1566</td>
<td>1765</td>
<td></td>
</tr>
</tbody>
</table>

Map 5.19: Zoom of Almshouse burial features in relation to trash deposit Features 87/88/99 [1999], 156 [1999] and 163 [1999].
Map 5.20: Reconstruction of Stratigraphic Levels for Features 87/88/99 [1999], with TPQ dates.
The reconstructed deposition episodes appear to show minimal distinction with regard to overall composition, if not with regard to date. Map 5.20 includes the TPQ for each level and all were found to date to the Revolutionary period. The biggest distinctions between the levels is the overall size of 88A compared to the others, the differences in the percentages of faunal remains, and the various distributions between faunal and non-faunal remains. However, the material remains are similar throughout.

In favor of definitive association and the similarity of type and date of materials, Feature 87 [1999], 87_88 [1999], 88 [1999] and 99 [1999] are considered as a single deposit for analysis. There are a total of 22,146 artifacts in the Feature 87/88/99 [1999] complex and they fall into seventeen functional categories. Table 5.09 provides a breakdown of these categories and Figure 5.03 graphically represents the percent of contribution.
Table 5.09: Features 87, 88 and 99 [1999] by Functional group.

<table>
<thead>
<tr>
<th>FUNCTIONAL GROUP</th>
<th>ARTIFACT COUNT</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>1</td>
<td>.004%</td>
</tr>
<tr>
<td>Architectural</td>
<td>2551</td>
<td>11.5%</td>
</tr>
<tr>
<td>Arms</td>
<td>3</td>
<td>.013%</td>
</tr>
<tr>
<td>Clothing</td>
<td>58</td>
<td>.26%</td>
</tr>
<tr>
<td>Communications</td>
<td>1</td>
<td>.004%</td>
</tr>
<tr>
<td>Faunal</td>
<td>7741</td>
<td>34.9%</td>
</tr>
<tr>
<td>Flora</td>
<td>51</td>
<td>.23%</td>
</tr>
<tr>
<td>Fuel</td>
<td>1422</td>
<td>6.4%</td>
</tr>
<tr>
<td>Household</td>
<td>8309</td>
<td>37.5%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>1169</td>
<td>5.27%</td>
</tr>
<tr>
<td>Lighting</td>
<td>48</td>
<td>.21%</td>
</tr>
<tr>
<td>Manufacture</td>
<td>24</td>
<td>.10%</td>
</tr>
<tr>
<td>Medical</td>
<td>114</td>
<td>.51%</td>
</tr>
<tr>
<td>Personal</td>
<td>532</td>
<td>2.4%</td>
</tr>
<tr>
<td>Sanitary</td>
<td>10</td>
<td>.045%</td>
</tr>
<tr>
<td>Tools &amp; Equipment</td>
<td>110</td>
<td>.5%</td>
</tr>
<tr>
<td>Toy/Recreation</td>
<td>1</td>
<td>.004%</td>
</tr>
<tr>
<td>Unclassifiable</td>
<td>1</td>
<td>.004%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22146</strong></td>
<td></td>
</tr>
</tbody>
</table>

Figure 5.03: Percent contribution of artifact categories for Features 87/88/99 [1999].
The Household functional group accounts for 38% of the assemblage and Food Related Faunal remains account for 35% of the assemblage. Combined, 73% of this deposit is food related.

The Household assemblage contains 8,309 items, the overwhelming majority of which are glass remains. Glass accounts for 68% of the household category and the majority of these are alcohol bottles. Alcohol bottle glass accounts for 25% of the entire assemblage. Among the bottles are wine, rum, and whiskey bottles. Those identified are blown bottles, there are several blown case bottles. Two bottle seals were uncovered. The first is a partial seal that reads “IVS 1765”. The second is from a nearly complete bottle and reads “Evert Byvanck Inn 177_” (Image 5.28). Byvanck was a wealthy merchant who by all accounts fled the city during the Battle of Long Island in August 1776. Byvanck noted that, upon returning to the city during the early days of the conflict, British troops were upon his country house near Corlear’s Hook (Van Buskirk 2002:129-133). The presence of the glass bottles may be the result of the plundering of local households by British troops. Also among the glass artifacts are stemware and drinking glasses. Several sherds of drinking glass exhibit etched designs in an oval and star pattern and a basket motif.

Of the 2,130 ceramic sherds with an identifiable ware type, 43% are creamware. Creamware has a general date range of 1762-1820 and was one of the most widely available ceramic types. Though most are undecorated or molded rim sherds, there are a few with notable decorations. The first is a bat-printed creamware punch bowl with a pastoral or landscape scene on its exterior. The interior base of the bowl is also decorated with cursive lettering that reads “The Brothers” encircled with a leafy vine (Image 5.29). This bowl was likely a custom-made item for a tavern; “The Brothers” being at least part, if not the entire, name of the establishment.
Bat printing is essentially transfer printing, as the “bat” refers to the medium that contains the pattern to be transferred to the ceramic. Early transfer printing, or bat printing, utilized bats constructed of glue and isinglass. The “bat” was pressed onto the copper plate and the linseed oil based pattern adhered to the bat. The bat was then pressed to the already glazed ceramic and the pattern was transferred. The vessel was then fired in the kiln a second time to set the design in place. This method was time-consuming and the bat could only be used once, as such these were expensive items.

Another notable item is a near complete teapot including its lid (Image 5.30). The “chintz” painted creamware teapot has a molded braided handle and the spout a molded fluted design. The finial is floral with molded leaves at the attachment. Both the teapot and lid are over-the-glaze polychrome painted with a broad pink field bounded with red stripes and interspersed floral pattern in green. The neck of the teapot is decorated with a green floral decoration. This vessel is rare on archaeological sites and was likely the property of an officer (Janowitz and Wall, in press).

Polychrome overglaze decoration has a beginning date of 1765. Another example in this assemblage is a matching teacup and saucer (Image 5.31). The teacup has a beaded rim and the saucer a beaded center circle. The painted floral decoration is in a red-orange with yellow and dark olive green.

Other ware types within the household assemblage are pearlware, tin-glazed earthenware, white salt-glazed stoneware, various slipware both locally produced and Staffordshire type, and stoneware. Among the ceramics are a range of forms, including plates, bowls, dishes, pitchers,
jugs, porringers and several teapots and teacups. Notably absent in any quantity are platters and other serving dishes.

Multiple teapot fragments as well as the above-mentioned polychrome teapot represent tea, a social activity. There is an uncommon French faience teapot and a molded creamware teapot spout as well. Also speaking to social activity is a lathe-turned agate tankard.

Among the locally produced wares are two near complete jars. The nearby Crolius and Remmey pottery may have produced these (Images 5.32 and 5.33).

Other household items include a minimum of five bone knife handles and several pieces of an iron cooking pot and a kettle.

Image 5.28: Bottle seal with “Evert Byvanck”.
Image 5.29: Creamware bat-printed punch bowl. The center medallion of “The _ Brothers” likely refers to a tavern name.

Image 5.30: Creamware polychrome painted teapot with entwined handle.
Image 5.31: Matching creamware polychrome painted teacup and saucer.

Image 5.32: Locally produced stoneware jar with cobalt butterfly design typical of the Crolius and Remmey potters.
Food Related faunal remains account for 35% of the assemblage. The faunal remains are 60% shell, mostly clam (61.5%), oyster (38%), and whelk. Fish is also present and the identified species are local fish: striped bass and porgies.

Pig, a significant amount of cattle, and caprine dominates the remainder of the faunal assemblage. The cattle bones are largely hindquarter and forequarter portions. These would provide the greatest amount of meat and grease. The presence of feet and limbs suggests primary butchering nearby. In contrast, the pig bones, though also from the greatest meat producing regions of the animal, indicate secondary butchering, which involves boning and the trimming of primal cuts. The cuts present, as well as the age of the animals, suggest that pig was being brought in as provisions in the form of hams and shoulders.
Initial associations of this feature with the British soldiers on site was largely due to the significant numbers of alcohol bottles, presumably reflective of rum consumption. Overall the glass and ceramics found within Feature 88 are similar to many other British soldier contexts in North America and Canada during the mid to late 18th century (Feister 1984; Miller 1970; Smith 1983; Sussman 1978). However, military items are near absent. The basic profile of a barracks deposit does not greatly differ from that of a poorhouse or prison assemblage. In theory, a poorhouse assemblage may have a greater number of medicinal items or bone button manufacture remnants. There may not be any bone button manufacture artifacts in this assemblage, but there are medicinal items in quantity comparable to other deposits from the site. Also, the presence of alcohol bottles can be attributed to other populations. Historic documents speak of prisoners consuming alcohol and it was often available for sale to prisoners. The presence of liquor bottles cannot, then, be a clean indication of military deposition.

The remainder of this large trash deposit consists of various small items, including several buttons of varying material, numerous smoking pipe fragments, gun flints, a musket ball, kiln furniture from pottery production, horseshoes, worked bone, and a padlock. There are a few chamber pots and several medicine bottles.

There are artifacts associated with pottery manufacture and other items intrusive to the assemblage, indicating an off-site source. There is also the significant presence of cattle and caprine horn cores, remnant of craft production. The horn cores are possibly from of an activity associated with the Almshouse or off-site dumping and not the soldiers on site. These are a few of the reasons why this large deposition cannot be solely associated with the British barracks.
Also, of note is the absence of dog, free-roaming pig, or rodent gnawing on the bones. This suggests either a short-term deposition or that the area was protected in some manner from scavenging dogs and pigs; rodents were much more difficult to keep out.

The accretionary nature and range of materials dominated by household and food related items suggest that multiple persons from the property, and perhaps beyond, were utilizing this area for refuse disposal. We know that the Almshouse had direct access to the area; this was where they were burying their dead. While it may be possible to associate some items with specific groups, at a minimum, this deposit and area was a communal trash repository.

There were two additional midden deposits in this area, Features 156 [1999] and 163 [1999]. These are likely part of the Feature 87/88/99 [1999] assemblage, though there was not enough information in the field notes to confirm this. It is also possible that these are smaller depositions in an area already used for trash disposal. Feature 156 [1999] is not very large compared to Feature 163 [1999] and Food Related faunal remains dominate both (Table 5.10). The features are immediately west of Feature 87/88/99 [1999] and are contemporaneous. The TPQ for Feature 156 [1999] is 1762 based on the presence of creamware. The TPQ for Feature 163 [1999] is 1775 based upon the presence of pearlware.
Table 5.10: Artifact Counts for Features 156 [1999] and 163 [1999].

<table>
<thead>
<tr>
<th>FUNCTIONAL GROUP</th>
<th>ARTIFACT COUNT F156</th>
<th>PERCENTAGE F156</th>
<th>ARTIFACT COUNT F163</th>
<th>PERCENTAGE 163</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural</td>
<td>165</td>
<td>8.5%</td>
<td>915</td>
<td>13%</td>
</tr>
<tr>
<td>Arms</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>.014%</td>
</tr>
<tr>
<td>Clothing</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>.014%</td>
</tr>
<tr>
<td>Faunal</td>
<td>1430</td>
<td>74.3%</td>
<td>3896</td>
<td>55.7%</td>
</tr>
<tr>
<td>Floral</td>
<td>0</td>
<td>0</td>
<td>96</td>
<td>1.37%</td>
</tr>
<tr>
<td>Fuel</td>
<td>27</td>
<td>1.4%</td>
<td>115</td>
<td>1.64%</td>
</tr>
<tr>
<td>Funerary</td>
<td>1</td>
<td>.05%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Hardware</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>.057%</td>
</tr>
<tr>
<td>Household</td>
<td>198</td>
<td>10.3%</td>
<td>1589</td>
<td>22.3%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>22</td>
<td>1.14%</td>
<td>123</td>
<td>1.75%</td>
</tr>
<tr>
<td>Lighting</td>
<td>1</td>
<td>.05%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Manufacture</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>.014%</td>
</tr>
<tr>
<td>Medical</td>
<td>5</td>
<td>.26%</td>
<td>27</td>
<td>.38%</td>
</tr>
<tr>
<td>Personal</td>
<td>75</td>
<td>3.9%</td>
<td>222</td>
<td>3.17%</td>
</tr>
<tr>
<td>Tools &amp; Equipment</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>.057%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1924</strong></td>
<td></td>
<td><strong>6994</strong></td>
<td></td>
</tr>
</tbody>
</table>

Feature 71 [1999] is located immediately to the north of Feature 87/88/99 [1999]. It was initially described as “an artifact concentration.” Minimal information is available about the excavation of Feature 71 with one exception, the Feature Log. All sources discuss or represent F71 in conjunction with F70 (e.g. the PES Bag Inventory Sheet lists Bag 1089 as relating to Feature “70-71,” a Feature Record refers to backhoe excavation of “features 70 & 71”). Apparently Feature 70 [1999], 71, and possibly Feature 72 [1999] were excavated at the same time as a single unit. However, for clarity, it is referred to as Feature 71 [1999] in this report.

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10 Features 70 and 72 are not listed in the Summary of Trash Pit Features nor do they appear on the PES site map.
Feature 71 [1999] consists of a total of 1,653 artifacts and more than half of these are Food Related faunal remains. The second largest category is Household artifacts. The dominance of food related artifacts suggests that this was another midden for the disposal of dining/kitchen garbage. Table 5.11 and Figure 5.04 present an overview of the assemblage by functional category.

There are three intrusive artifacts: a late nineteenth century pottery sherd, a plastic cap of the type used to cover electric wire, and a plastic cigarette holder. If the intrusive items are dismissed, the TPQ for this feature is 1775 based on two undecorated pearlware sherds.

Table 5.11: Feature 71 [1999] artifact count.

<table>
<thead>
<tr>
<th>FUNCTIONAL GROUP</th>
<th>ARTIFACT COUNT</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural</td>
<td>160</td>
<td>9.68%</td>
</tr>
<tr>
<td>Arms</td>
<td>1</td>
<td>.06%</td>
</tr>
<tr>
<td>Clothing</td>
<td>2</td>
<td>.12%</td>
</tr>
<tr>
<td>Communication</td>
<td>1</td>
<td>.06%</td>
</tr>
<tr>
<td>Faunal</td>
<td>919</td>
<td>55.6%</td>
</tr>
<tr>
<td>Fuel</td>
<td>52</td>
<td>3.14%</td>
</tr>
<tr>
<td>Household</td>
<td>247</td>
<td>14.9%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>179</td>
<td>10.8%</td>
</tr>
<tr>
<td>Medical</td>
<td>2</td>
<td>.12%</td>
</tr>
<tr>
<td>Personal</td>
<td>69</td>
<td>4.17%</td>
</tr>
<tr>
<td>Sanitary</td>
<td>21</td>
<td>1.27%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1653</strong></td>
<td></td>
</tr>
</tbody>
</table>
Creamware is the most common ceramic ware type, making up slightly over one-quarter (26.5%) of the total household ceramics. Staffordshire slipware and tin-glazed earthenware (14.2% each), white-salt glazed stoneware (12.4%) and North American stoneware (11.5%) are also well represented.

Two interesting vessels were recovered from this feature. One is a debased scratch-blue mug with a medallion bearing the initials “GR”; the initials stand for “Georgious Rex,” or King George III (Image 5.34) (Jefferson Patterson Park 2012). The other vessel of note is a tin-glazed earthenware punch bowl decorated with a hand painted cobalt blue fish and manganese splashing (Image 5.35). This punch bowl is an English tin-enamede ware produced in the eighteenth century that has been found in other British military contexts (Miller & Stone 1970:40). Another interesting item that
may point to an association with the British military is part of a smoking pipe bowl with a molded armorial design.

Feature 71 [1999] contains a large percentage of liquor bottles, which is also consistent with the possibility of British soldiers as primary users of this deposit. Liquor bottles constitute 52% of the Household assemblage. It may be said that the Feature 71 [1999] midden was used by a group of people who consumed a large amount of alcohol. While not definitively British soldiers, this would be wholly consistent with findings at other eighteenth century British military sites. However, alcohol and tobacco were also available for purchase to prisoners, usually from prison staff (Johnston 2010:22–23).

Dating for this feature clearly suggests the 18th century Revolutionary era. The TPQ for the feature is 1775 based on two pearlware sherds. The mean ceramic date is 1761.
Image 5.34: Debased scratch-blue mug with medallion bearing the initials “GR”.

Image 5.35: Tin-glazed punch bowl.
Features 85 [1999] and 86 [1999] were two features located in succession of one another and north of the larger grouping of trash features. Described as a midden, this feature was situated just south of the eastern end of the Second Barracks. It appears to be a smaller isolated deposit. Feature 85 [1999] was a pit feature located within Feature 86 [1999]. Feature 86 [1999] was a larger trash pit feature that surrounded Feature 85 [1999] and contained several strata. The lack of distinction between the two features, only noted post excavation, dictates that the features be combined as Feature 85/86 [1999]. The feature was excavated as a single feature in three arbitrary levels. It is not clear if the feature was fully defined or excavated and the plan view drawing suggests it was not (Map 5.21).

Feature 85/86 [1999] is small, consisting of only 178 artifacts (Table 5.12). It is not clear from the field notes if this was sampled or fully collected. The largest percentage of artifacts is faunal remains followed by Household artifacts. A copper coin is also part of the assemblage. The coin, which was unidentifiable during lab analysis, was noted by PES as a Roman coin.

The artifacts from Features 85/86 date exclusively to the 18th century. The TPQ for the assemblage is 1762 based on the presence of creamware. The mean ceramic date is c.1763.

Feature 90 [1999] was located north and slightly west of the Gaol, but south of the communal disposal area and burial ground. It was drawn as a shallow bowl-shaped depression that was part of a larger sheet deposit, but the feature was not fully excavated. The samples taken recovered 81 artifacts. The TPQ is 1762 based on the presence of creamware.
Map 5.21: Plan view of Features 85 [1999] and 86 [1999].

Table 5.12: Feature 85/86 [1999] artifact count by functional group.

<table>
<thead>
<tr>
<th>FUNCTIONAL GROUP</th>
<th>ARTIFACT COUNT</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural</td>
<td>24</td>
<td>13.5%</td>
</tr>
<tr>
<td>Communication</td>
<td>1</td>
<td>.56%</td>
</tr>
<tr>
<td>Faunal</td>
<td>58</td>
<td>32.9%</td>
</tr>
<tr>
<td>Fuel</td>
<td>6</td>
<td>3.37%</td>
</tr>
<tr>
<td>Household</td>
<td>46</td>
<td>25.8%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>29</td>
<td>16.3%</td>
</tr>
<tr>
<td>Lighting</td>
<td>1</td>
<td>.56%</td>
</tr>
<tr>
<td>Manufacture</td>
<td>5</td>
<td>2.8%</td>
</tr>
<tr>
<td>Personal</td>
<td>5</td>
<td>2.8%</td>
</tr>
<tr>
<td>Sanitary</td>
<td>3</td>
<td>1.68%</td>
</tr>
<tr>
<td>Total</td>
<td>178</td>
<td></td>
</tr>
</tbody>
</table>
Area 2

Area 2 is arbitrarily defined as the area south of the Gaol and contains three deposits: Features 55 [1999], 104 [1999] and 182 [1999] (see Map 5.18). Features 104 [1999] and 182 [1999] are small deposits. Feature 104 [1999] was a refuse pit that was manually excavated and 100% screened\textsuperscript{11}. It was located south of the western end of the New Gaol and excavated in two levels. The feature contained 509 artifacts, most of which (70%) are shell based faunal remains. Interestingly no animal bone was recovered.

Among the ceramic wares, 68% are pearlware, lending a slightly later date to this assemblage compared with others from the eastern side of the site. The TPQ for the assemblage is 1775 and the mean ceramic date for the assemblage is 1792. There are two sherds that were identified as whiteware, which if correctly identified or not intrusive would push the TPQ to 1815. Either of these is possible. The size of the deposit does not suggest long term or heavy usage. Like many of the smaller trash features on site, this was likely a secondary dump associated with the Gaol and used in addition to the larger refuse deposition area.

Feature 182 [1999] was a small pit consisting of 86 artifacts and dating to the eighteenth century. Minimal field notes preclude any further determinations. There are no unique identifiers or artifacts in the assemblage.

\textsuperscript{11} This was specifically noted in the field notes for this project, it is the only feature noted to have been 100% screened during the 1999 project.
Feature 55 [1999] is the second largest trash deposit assemblage recovered during the 1999 project consisting of almost 8,167 artifacts\(^\text{12}\). PES’ field notes described it as a trash pit feature almost directly between the New Gaol and First Almshouse.

Documentation for Feature 55 [1999] is essentially non-existent. Field notes do record the initial discovery during unspecified monitoring on April 8, 1999. “Triage recovery” was conducted on April 9, with only “scanty documentation due to [the] speed of excavation.” The only descriptive notation regarding the feature concerns its contents, which are labeled “18th century.” The large amount of “clam shell and butchered bones” is also noted (PES Field Notes 1998-1999).

The largest category is Food Related faunal remains representing 67.7% of the assemblage. Table 5.13 provides a breakdown of the assemblage by functional category. The overwhelming majority of the faunal remains are clam shell, which represents 87.5%. The remainder of the faunal assemblage is 8% oyster shells and 4% animal bones.

The animal bones contain a significant number of cattle and caprine. Pig is present, but only in teeth or cranial elements. The cattle assemblage also contains a significant number of teeth and cranial elements. These could be reflective of inexpensive meat portions purchased for Almshouse residents.

There is a significant presence of heavy meat bearing portions of both cattle and caprine. For both species, the data indicates that these were prime animals slaughtered for meat. The majority of the

\(^{12}\) It is the third largest among all the deposits.
cows were between two and four years of age, considered the perfect age for slaughter for beef. This suggests they were beef cattle and not aged milkers or draft animals. Among the caprine examples, both lamb and mature sheep are present. As beef was the most expensive and desirable meat in eighteenth century New York City, it seems likely that these portions represent food for the British soldiers and not Almshouse or Gaol residents.

The presence of both expensive and inexpensive portions strongly suggests that several, if not all, of the communities occupying the Common used this deposit.


<table>
<thead>
<tr>
<th>FUNCTIONAL GROUP</th>
<th>ARTIFACT COUNT</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>2</td>
<td>0.024%</td>
</tr>
<tr>
<td>Architectural</td>
<td>811</td>
<td>9.93%</td>
</tr>
<tr>
<td>Arms</td>
<td>2</td>
<td>0.024%</td>
</tr>
<tr>
<td>Clothing</td>
<td>15</td>
<td>0.18%</td>
</tr>
<tr>
<td>Faunal</td>
<td>5534</td>
<td>67.7%</td>
</tr>
<tr>
<td>Floral</td>
<td>1</td>
<td>0.012%</td>
</tr>
<tr>
<td>Fuel</td>
<td>46</td>
<td>0.56%</td>
</tr>
<tr>
<td>Furnishings</td>
<td>4</td>
<td>0.048%</td>
</tr>
<tr>
<td>Household</td>
<td>1119</td>
<td>13.7%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>338</td>
<td>4.13%</td>
</tr>
<tr>
<td>Manufacture</td>
<td>6</td>
<td>0.073%</td>
</tr>
<tr>
<td>Medicine</td>
<td>9</td>
<td>0.11%</td>
</tr>
<tr>
<td>Personal</td>
<td>233</td>
<td>2.85%</td>
</tr>
<tr>
<td>Sanitary</td>
<td>20</td>
<td>0.244%</td>
</tr>
<tr>
<td>Tools &amp; Equipment</td>
<td>21</td>
<td>0.25%</td>
</tr>
<tr>
<td>Unclassifiable</td>
<td>6</td>
<td>0.073%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8167</strong></td>
<td></td>
</tr>
</tbody>
</table>

Household artifacts are the second largest category comprising 20% of the assemblage. Among Household artifacts the most numerous ceramic type is North American stoneware, representing 33.8%. In addition to North American stoneware, the other predominant ceramics are coarse
earthenware and Staffordshire slipware. White salt-glazed stoneware and creamware make up the bulk of the refined table ceramics.

There are a number of stoneware shallow bowls, possibly from the nearby Crolius and Remmey pottery. One interesting item is a small cup with a delicate handle decorated with a cobalt design reminiscent of birds and an iron-oxide wash (Image 5.36). This cup is likely a locally produced item, though the form is not typical. The design is likely a variation of the typically observed butterfly designs. Many of the stoneware items are over-fired or unfinished seconds or wasters that may have been donated to the Almshouse. It is equally likely that they could have been part of a singular dump event of waster material. Exemplifying this are stoneware wash basins with a typical Crolius and Remmey style butterfly design in the assemblage (Images 5.37 and 5.38).

There are several other ware types represented, including Chinese Export porcelain, tin-glazed earthenware, slipped redware, and Staffordshire style slipware. A Staffordshire porringer or drinking pot with combed decoration was partially reconstructed (Image 5.39).

There are three sherds of pearlware that are noted as transfer-printed, which would provide a TPQ of 1803 for this assemblage. It is not possible to definitively determine if these are intrusive without field notes. If they are considered to be intrusive the next, and more likely, TPQ date is 1795 from the polychrome painted pearlware sherds.
Image 5.36: Locally made stoneware teacup with a variation on the typical butterfly design.

Image 5.37: Wash basin with everted rim.
Image 5.38: Base of a stoneware wash basin with the butterfly design typical of Crolius and Remmey.

Image 5.39: Staffordshire slipware porringer or drinking pot.
The vast majority of personal items are smoking pipe fragments, comprising 79.3% of this category. Smoking itself is not an indicator of class, as pipes and tobacco were readily available to all economic strata (Baugher 2001:191). Most of the pipes are plain, which was common for the period. Only 8 of the 230 pieces have incised or molded decoration: five with rouletting on the bowl rims and three with floral molding. Three other bowls have the Gouda shield on both sides of the foot, showing their Dutch origin. Two of these pipes also bear an ‘S’ which means “slegh’t”, or ordinary. There is one bowl with an ‘L,’ but the meaning of this letter is unknown. One additional pipe has an eye-shaped mark on its foot.

Other items in this assemblage include Clothing (buttons and a few buckles) and Medicine (bottles). The assemblage also includes a small piece of a brass ruler and an iron knife or razor blade. Some of Sanitary artifacts are interesting. There are several stoneware chamber pot sherds, including one partially reconstructed, locally made example (Image 5.40). This pot is an excellent example of the type of items that were being made by local potters. The other interesting item is a stoneware shaving bowl decorated with a crude representation of scissors (Image 5.41). The previously mentioned stoneware bowls (Image 5.42) may be washbowls, not household items. Though further analysis and research would be necessary to determine this. The bowls have a distinct rounded form at the rim, similar to the barber’s bowl. A bone lice comb is also part of this category.
Image 5.40: Lightly glazed stoneware chamber pot, locally produced, with typical butterfly design.

Image 5.41: Stoneware shaving bowl decorated with scissor, straight razor, and a shaving brush or powder puff.
In 2013, excavation exposed what appears to be part of Feature 55 [1999].13 This is based on the location and type of artifacts observed and recovered. The area is 45’–55’ from the eastern entry gate and appeared to be the southern limits of 1999’s Feature 55. A total of 246 artifacts, which may be part of Feature 55 [1999], were recovered in this area as part of a general collection. Food Related faunal remains (48.5%) account for the majority of the assemblage, followed by Household artifacts (34.8%) (Table 5.14).

13 This was an extension of the 2010 excavation project.
Table 5.14: Artifact Count by Functional Group for artifacts potentially associated with Feature 55 [1999].

<table>
<thead>
<tr>
<th>FUNCTIONAL GROUP</th>
<th>ARTIFACT COUNT</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural</td>
<td>2</td>
<td>.8%</td>
</tr>
<tr>
<td>Faunal</td>
<td>120</td>
<td>48.6%</td>
</tr>
<tr>
<td>Household</td>
<td>86</td>
<td>34.8%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>1</td>
<td>.4%</td>
</tr>
<tr>
<td>Personal</td>
<td>37</td>
<td>14.9%</td>
</tr>
<tr>
<td>Toy/Recreation</td>
<td>1</td>
<td>.4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>247</strong></td>
<td></td>
</tr>
</tbody>
</table>

Analysis suggests a late-eighteenth century date for this deposit, which is likely a midden deposit used by both the Almshouse and the Gaol occupants. It is unlikely that the Feature 55 [1999] midden deposit was used exclusively by one group. Instead, it is probable that the disparate groups that shared this space interacted in the minutiae of their daily lives. This shared use is most clearly apparent in the faunal assemblage, which contains both quality and poorer meat portions.

In considering the dated trash deposits throughout this site with reference to their location, it seems clear that the majority of the eighteenth-century materials are from the eastern side of the property. Other dateable eighteenth-century features located in the present-day park are briefly presented relative to the present-day configuration of the property.
OTHER EIGHTEENTH CENTURY FEATURES

Feature 30 [2010] was a large circular stone shaft feature exposed at 4.9’ below surface (bs). Large stone slabs measuring approximately 3.8’ x 2.9’ capped the feature. Removal of the stone cap revealed a dry laid shaft with an interior diameter of 5.5’ and an exterior diameter of 7.5’ (Image 5.43). The interior fill consisted of four layers, each containing redeposited materials. The final depth of Feature 30 [2010] was 9’ bs.

Image 5.43: Excavation of Feature 30 [2010].

Feature 30 [2010] was identified as a crudely constructed well, based upon its dry laid circular construction and its bottom elevation of 9’ bs. This is approximately the same bottom elevation as Feature 8, the well located in the northeast excavation area.
The stones used to construct the well were undressed rough-cut stones. The well was likely constructed in the eighteenth century for the British barracks. Though there was no information to clarify a construction date, the map analysis places this feature within the courtyard created by the barracks (Map 5.22). The TPQ for the fill materials is 1840, which suggests that the well was filled during this period and prior to the construction of the Tweed Courthouse.

Map 5.22: Western half of the Common in the eighteenth century.
Feature 44 [1999] is a circular dry-laid stone catch basin located, via mapping, at the southeast corner of one of the barracks buildings. The feature measured approximately 3’4” in interior diameter and slightly over 5’ feet in its exterior diameter at 1.75’ bs. The feature had been capped with three long tabular stones. Excavation of the basin interior revealed several soil layers, but no artifacts except for some decaying wood at the bottom of the feature. Based on descriptions in field notes and the presence of a nineteenth century stone and brick drain-line that connected into Feature 44 [1999], it appears that this is an eighteenth-century feature, likely a well, that was be re-purposed for the drainage system.

Feature 58 [1999] was a shallow, basin shaped trash pit. This feature contained a significant amount of butchered bone as compared to artifact remains, which led to the conclusion that Feature 58 [1999] was a “bone disposal midden”. The location of Feature 58 [1999] would have placed it in the immediate location and partially within the footprint of the British barracks on the western side of the property and north of the Bridewell. The TPQ for this feature is 1795/1800.

Overall, Feature 58 [1999] is a relatively small assemblage containing 398 artifacts. The artifacts from this feature were predominantly Food Related, which represent 50% of the assemblage. Architectural artifacts comprise the second largest category at 31%.

With respect to ceramic wares, earthenware is dominant with 49 % Pearlware, 27% Creamware, and 9% Redware. Most of the pottery, especially the earthenware, dates between 1780 and 1840. The MCD is 1792 and the pipe date is 1759. Within the glass category, bottles make up a significant percentage. Aside from alcohol bottles, remnants of medicinal bottles were also present.
Architectural remains included small sherds of window glass as well as brick and nails, both square-cut and round. One particularly interesting artifact was a possible knife handle with a mother-of-pearl inlay.

The date and location of Feature 58 [1999] may link it to the Bridewell, which operated from 1775 – 1838.

Feature 60 [1999] (not shown on the map) was a shallow basin trash deposit. It is located within the compound created by the British barracks on the western side of the property. Feature 60 [1999] was likely part of a larger sheet deposit or shallow trash deposit. Not enough stratigraphic evidence exists to make a definitive determination. This feature was exceptionally small, containing only thirteen artifacts.

**Summary**

The eighteenth century was the period of the densest occupation on the site. It served as military barracks, prison, poorhouse, and burial ground. Both intact burials and fragmented human remains were found north of the barracks area during the 1999 and 2010 projects, as well as the mid-1990s Hartgen project. The evidence from these projects suggests that excavation for the footprint of the Tweed Courthouse, which encompassed a larger area than the Second Almshouse, disturbed and redeposited a portion of the Almshouse burying ground. Per the minutes of the Common Council (August 1, 1785), the area behind the barracks would be used as a burial ground for the Almshouse and the Bridewell.

14 Square nails can be wither wrought or cut, often they are too rusted for definitive identification and are simply referred to as “square” in those instances.
Historically, the area was north of the barracks and west of the upper barracks. Several features were recovered in this area in 1999, including four trash deposit features (Features 11, 29, 123 and 174) and architectural features (Features 6, 9, 10, 17 and 18). These all seem to be associated with the Second Almshouse, which was constructed in 1797 and will be discussed in the following chapter.

As the Revolutionary period was coming to an end, the nature of the Common would, once again, shift with the new century. Beginning in 1803, with the selection of the Common as the site of the new City Hall, the property would be re-made. The City was changing and the changes made to the Common left their own archaeological signature.
In the 1790s, the ongoing struggle between those advocating that the Common be used as a public park and those wanting it to remain as a center of municipal institutions was brought to the forefront. City Hall bridged these two visions. In the new plans for the property, the southern portion would remain a public space and would now be equipped with pedestrian walks, benches, landscaped trees, and fountains. The northern portion, where the Almshouse, Gaol and other institutions were located, would remain the municipal end. In 1796, New York City formally laid out Chambers Street, setting the northern boundary of the present day park. The lands north of Chambers Street quickly developed into a grid of streets as developers leveled hills and filled wetlands. Only the characteristic triangular shape of the Common remained unaltered (Map 6.01).

In July 1796, authorities ordered improvements to the Common area “in front of the Alms House & Bridewell” (MCC 1784–1831 1:733). Part of the improvements were to plant trees along Murray Street, adding to the park-like atmosphere. In 1807, New York’s first guidebook, The Picture of New-York, noted that the park was a “beautiful grove” planted with elms, planes, willows, and catalpas, with rows of poplars lining the sidewalk (A. T. Goodrich & Company 1825).

Over the course of the next two decades, new, small structures started appearing in the park and several of the older structures began to serve new purposes. Among the new structures was a second Almshouse, which opened in 1796. Several attempts were made to reuse the first Almshouse, including being used as a horse market. A public notice that ran in the May 24, 1798 edition of the New York Gazette prohibited the sale of horses by the public “except opposite the
Bridewell fence beginning at the northwest and running to the southeast corner of the Gaol fence” (New York Gazette, May 1798)—indicating that, at least during this period, the two prisons had been fenced off. Ultimately, however, the structure was razed in 1797.

THE CENTER OF CITY GOVERNMENT

As the nineteenth century approached, New York was experiencing another spurt of population growth and the only direction to expand on Manhattan Island, without extensive landfilling, was north. As a result, the geographic and political center of the city also migrated northward. The decision to build the “new” City Hall in the park, on the site of the first Almshouse, reflects this northward shift. The Commons had once been located on the northern edges of the colonial city. The seat of government was now moving to the areas in which the undesirable elements of the population had once been relegated.
Map 6.01: City and County of New York, J. H. Colton 1836.
With the northward expansion came a flurry of activity. Residential neighborhoods rapidly developed north of the park and it soon became apparent that even further expansion would occur. In the 1790s the economic elite, recognizing the new contours of the city, began to build their mansions facing the soon-to-be-park on the Broadway side, turning the area into a fashionable district (MCC 1784–1831 2:616; Hall 1910:385–424). The 1800 decision to build City Hall mollified competing visions of how the land should be used. The new French Renaissance-inspired City Hall would be the ornament of the city, while at the same time providing needed civic and governmental services. The southern half of the former Common would remain a public park. In both cases, City Hall and its park were well suited to the new genteel neighborhood emerging around it.

The Common Council, the organization tasked with managing the use and redevelopment of the park, officially decided that the northern area would provide the ideal open space for the new building. Soon, the entire northern end of the area was redesignated as the seat of municipal government and the Common Council took several steps towards official relocation. Part of the restructuring included the council’s orders to remove the two stables standing in the Almshouse yard, as well as the barn. An old wooden fence near the Almshouse was also torn down (MCC 1784–1831 3:245, 258, 269). New buildings were constructed and old buildings were converted to house the offices and various functions of the expanding city government. Additionally, the Common was officially renamed City Hall Park (Burrows and Wallace 1999).
THE NEW CITY HALL

In 1802, the City held an architectural competition for the new City Hall building and John McComb Jr. and Joseph-Francois Mangin won. On April 5, 1803, John McComb “marked out the ground for the building and the cart-men began to dig for the foundation” (McComb family papers 1757–1858). The three other structures on site: the Bridewell, the Gaol, and the second Almshouse were taken into consideration when planning the new building (Map 6.02). The Common Council required that the front wings of the new building align with Murray Street (Adams 1910; Stokes 1915 1:392). The cornerstone for the “New City Hall”, as it was referred to in the contemporary media, was laid on May 26, 1803, by then Mayor Edward Livingston.

John McComb’s diary, details the years 1801–1804, though construction continued for eight years (MCC 1784–1831 3:258). McComb presents a day-to-day accounting of the early years of construction. A great deal of time is spent discussing the lack of funds, which seemed to be a constant source of anxiety. McComb noted that work progress suffered delays due to “dissatisfaction on the part of the workmen as to their pay.” A yellow fever epidemic in 1805 further hampered work because it caused many to flee the city (McComb family papers 1787–1858).
Map 6.02: McComb’s plan of the property and the proposed City Hall.
As completion of City Hall neared, municipal authorities sought to upgrade the park’s image. In 1808, just one year after it opened, the Free School moved across the park to a former state arsenal on the corner of Chatham Street and Tryon Row. In 1809, the council acquiesced to public demand and ordered the whipping post and gallows removed from in front of the Bridewell. A visitor named Timothy Dwight noted, “the infliction of punishment was found to be so revolting to the feelings of the Community” (Dwight 1821–1822:448–484). In 1809, gas lamps were installed in the park. By 1810, turnstiles were added to the park’s gates to help regulate pedestrian flow (MCC 1784–1831 4:716–717; 5:572 and 6:372;).

City Hall, completed in 1811 (Image 6.01) stood two and a half stories and measured 215’ x 105’. The south, west, and east sides of the building consisted of expensive Massachusetts marble from the Johnson & Stevens Quary in West Stockbridge, Massachusetts. The north side of the building was constructed using brownstone from New Jersey, due to lack of funds according to McCombs diary. DeWitt Clinton was the first mayor to inhabit City Hall.
By 1812, all of New York’s governmental offices had moved to their new French Renaissance–style home. The move initiated the last round of improvements and transformations of the park. During this period, all residents of the second Almshouse were moved to the new hospital complex at Bellevue located north of the growing city.

Though cited as “the most successful piece of civic architecture in New York” at the time of its construction (The Architectural Record vol. 23–24:387), it was not long before additional improvements and renovations were made to both the park and the building.
The grounds to the south and north of City Hall were renovated in 1814. In August 1816, a committee of the Common Council recommended a botanic garden be planted between the New York Institution and City Hall.\footnote{This was the name for Second Almshouse building after all inmates/patients were moved to Bellevue and the building was utilized by various organizations including the New York Historical Society.} In 1817, the council ordered that:

… the Ground between the City Hall and the old Alms House and that between this time and the first of May next, the whole space to be laid down in Grass, bordered with trees and thrown open for the benefit of New York in the same manner as the spaces in front of the Hall, reserving however so much as may be necessary in the discretion of the Committee to be enclosed for the use of the Hall and Bridewell [MCC 1784–1831 7:715 and 8:600, 790–791].

An 1860 print by George Hayward, depicting the 1809 landscape, shows a 5’ to 6’ high wooden picket fence running north along the east side of Broadway about Warren Street (Image 6.02). In March 1817, the Common Council decided to erect an English-made iron fence. This fence ran from “the Engine House opposite Warren Street and running northerly to Chamber Street; thence along Chamber Street to a point in line with the west end of the New York Institution” (MCC 1784–1831 9:84, 125 and 206 and New York Gazette June 19, 1817). Four years later, the council opted to replace the southern wooden picket fence. Starting from the southern tip of City Hall Park, the new fence was to “be so extended as to connect it with that already erected” (MCC 1784–1831 11:686). Another iron fence with a diamond slat top ran from the engine house to the front of the Bridewell and a southern entrance to the park was ornamented with four marble columns to support two new pairs of iron gates.
New York’s elegant City Hall was joined by the Rotunda, which was built in 1818 at the northeast corner of the park. The artist John Vanderlyn built the Rotunda to exhibit his panorama, “The Palace and Garden of Versailles”. As New York’s first art museum, the Rotunda added to the cultural prestige of the booming city (Avery 1988).

In 1824, the Common Council called for the removal of the Gaol and all the other small buildings between the Free School on Tryon Row and the park. The council planned to sell the land on which the Gaol stood and use that money to build a larger prison at a far remove from the now-fashionable City Hall Park in the northern part of the city. However, instead of being demolished, the Gaol was converted into a hall of records. In 1830, the prisoners in the Gaol were transferred to a building at Bellevue and renovation work began for the hall of records (MCC 1784–1831 19:193–195).

As the 1830s progressed, only City Hall and its converted annexes remained within City Hall Park. The re-designation of old institutional buildings into governmental offices set the park’s transition into its final stage of development. In 1838, the demolition of the Bridewell removed the last vestige of the park’s former institutional role. From 1861–1872, the construction of the Tweed Courthouse occupied the northern half of the park. Tweed was built atop the location of the second Almshouse, destroyed by fire in 1854.

With the addition of Tweed Courthouse, the park began to take on its present-day configuration, though it still was host to a myriad of construction and improvement projects. These projects included the demolition of the Rotunda (1870) and the installation of a new fountain (1871) and
electric lamps (1903). In 1939, the post office building at the southern tip of the park was demolished, restoring the park to its original triangular shape.

The nineteenth century construction and development of the Common is heavily represented in the archaeological record. The extensive construction works of City Hall and the Tweed Courthouse greatly impacted and modified the landscape. The presence of these structures and their construction impacts, various modifications, and use of eighteenth century features created the temporal and physical complexity of the archaeological landscape.

Image 6.02: View of Buildings in the Park, N.Y., as it was in 1809, by George Hayward 1860.
THE “NEW” CITY HALL ERA - NINETEENTH CENTURY ARCHAEOLOGICAL FEATURES

The significant nineteenth century archaeological discoveries are mostly related to City Hall’s construction, workers, and various renovations (Map 6.03). They also document the area’s use as a recreation landscape. The nineteenth century was a period that transformed the property formerly occupied by institutions and thousands of the City’s poor, sick, and indigent into a public park and an icon of prosperity. The ensuing intensive redevelopment is readily apparent on the archaeological landscape.
The last vestiges of the previous populations are represented by the deposition of materials within the demolition of the Bridewell in 1838 and disturbed burials in the area surrounding Tweed Courthouse. There are also features that can be related to the Second Almshouse, constructed in 1797.

Among the earliest evidence of the “new” City Hall era is a large midden deposit dated to between 1803 – 1815. Though the midden is a short-term deposition (Feature 28 [2010]) that occurred during the construction period of City Hall, it is the second largest trash deposition to be recovered from this site. The trash deposit was created during what could be considered a transitional period at the site when City Hall co-existed with the Second Almshouse, Gaol, and Bridewell.
Map 6.03: CHARM depicting the nineteenth century configuration and archaeological features within the modern-day footprint.
The Second Almshouse

The Second Almshouse was constructed in 1797 as a successor to the first Almshouse, located further south between the Gaol and the Bridewell. The Second Almshouse was constructed at the northern part of the Common where the former barracks once stood and where Tweed Courthouse stands today (see Map 6.03). This Almshouse only operated for approximately 34 years; it was repurposed for use as public offices in 1831. The structure was destroyed by fire and demolished in 1854.

Although the massive amount of construction from the building of the Tweed Courthouse destroyed most of the Second Almshouse, there are some features that demonstrate an association.

Feature 102 [1999] was an architectural structure labeled as “brick foundation elements” by PES. The structure was composed of brick, mortar, and stone and, for reasons unstated, was divided into six elements by the archaeological excavators. Element 1 is described as an “L”-shaped brick wall that is five courses high; Element 2 is described as a single course brick floor; Element 3 is described as a brick wall that cuts Element 1 at the east, but is two inches lower than Element 1; Element 4 is a “U”-shaped brick element that encloses most of Element 5; Element 5 is a two course brick floor; and Element 6 is a thin section of a brick wall that may have been part of Element 2. Large stone slabs surrounded the area containing these brick elements.

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2 There is a plan view drawing but no photographs or discussion of differences in building materials.
The field notes, while somewhat detailed, are not very illustrative. The planimetric drawing of the feature provides a better understanding of the site (Map 6.04). Visually, Feature 102 [1999] appears to be a single structure. Brick samples taken from this feature date to the early nineteenth century. Other artifacts recovered include a variety of building materials, such as square-cut nails, window glass, bottle glass, the bone handle of a dining utensil, and a variety of ceramic wares. Dateable types among the ceramic wares include green and blue edgeware (1795-1840); overglaze hand painted polychrome pearlware (1775-1810), porcelain, and blue transfer-print pearlware (1800-1840). The blue transfer-printed sherd provides an 1800 Terminus Post Quem (TPQ).
Map 6.04: Planimetric schematic of Feature 102 [1999]. Refer to Map 6.03 for overall location within the site.
Map analysis places the feature within the interior of Second Almshouse, though the angle does not appear to correspond to the building. Though that could be a mapping error. It is likely that Feature 102 [1999] is an interior feature within the Second Almshouse. The feature’s form is suggestive of a hearth, though field notes do not mention the presence of ash or charring.

Additional features were documented northwest of the Almshouse, including Feature 174 [1999], a small trash deposit containing 278 artifacts. The majority of these artifacts (67%) are from the Household category. Notably, there is a complete absence of liquor bottles in this assemblage and only five faunal remains.

The TPQ for Feature 174 [1999] is 1795 based on the presence of polychrome hand-painted pearlware. This date and the feature’s location suggest it is perhaps a small secondary trash deposit related to the Second Almshouse that was constructed in 1797.

Features 6 [1999] and 10 [1999] were two parallel foundation walls (Image 6.04). Though of similar construction, it is not clear if they are part of the same structure. Feature 9 [1999] was a post-hole, described in field notes as intrusive to the original composition of Features 6 [1999] and 10 [1999]. It is not clear from the field notes if this means that Feature 9 [1999] was situated in the space between Features 6 [1999] and 10 [1999].
The artifacts from the three features are similar in type and are mostly square-cut nails, window and bottle glass, and ceramic sherds. Feature 6 contained one lead musket ball. The ceramic wares provide a general early-nineteenth-century-date for the features.

Using a “location equals association” approach to map analysis places Features 6, 9, and 10 [1999] in relation to the Second Almshouse as they lie approximately 136’ west of the structure. However, their function remains undecided.

Feature 17 [1999] is a brick path likely associated with the Second Almshouse as map analysis places it approximately 30’ north. Feature 18 [1999], which was uncovered adjacent to Feature 17 [1999], is described as a post-hole or possible hitching post. Artifacts from Features 17 [1999] and 18 [1999] are structurally identical, suggesting the two features were contemporaneous.
Feature 17 [1999], a path, is also immediately adjacent to Feature 17 [2000], a post-1850 brick wall. Based on map analysis, the path leads directly to/from Feature 17 [2000]. The 2000 report does not discuss encountering Feature 17 [1999]. Though its function is unknown, Hartgen hypothesized that Feature 17 [2000] was related to the Second Almshouse when it was used as a public institution (Hartgen 2003).

Work by Hartgen, referred to as the 2000 or Hartgen project, documented several features believed to be associated with the Second Almshouse. These are Features 11 [2000], 14 [2000], 15 [2000], 16 [2000], 17 [2000], and 18 [2000]. Features 11 [2000] and 15 [2000] consisted of fragmentary remnants of two stone foundations. Based on the placement of the stones and the associated builder's trench, it appeared that Feature 11 was the corner of a former structure, possibly part of the Second Almshouse or more likely an outbuilding. Feature 15 was identified as a possible c. 1810 brick drain that could have been associated with the Second Almshouse. Feature 14 [2000] was identified as a foundation wall of the Second Almshouse. Its location and orientation matches the mapped location of the east wall of the structure.

Feature 18 [2000] was a stone and brick lined cold storage house located behind the Second Almshouse (Map 6.05). A total of 961 artifacts were recovered from within this structure. Table 6.01 provides a breakdown of the functional groups according to Hartgen’s analysis. The majority of the items are Food Related faunal remains. Among the faunal remains, cattle was the most abundant and included veal and beef. The beef cuts included a range of portions, including stew cuts and prime rib and roasts from the sirloin. Pig and sheep were also present.
Map 6.05: Plan view of Feature 18 [2000].

Table 6.01: Feature 18 [2000] artifact counts.

<table>
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<tr>
<th>FUNCTIONAL GROUP</th>
<th>ARTIFACT COUNT</th>
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<td>52</td>
<td>5.4%</td>
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<tr>
<td>Activity</td>
<td>3</td>
<td>.31%</td>
</tr>
<tr>
<td>Food</td>
<td>445</td>
<td>46.3%</td>
</tr>
<tr>
<td>Personal/clothing</td>
<td>37</td>
<td>3.85%</td>
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<tr>
<td>Kitchen</td>
<td>405</td>
<td>42.14%</td>
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<td>19</td>
<td>1.97%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>961</strong></td>
<td></td>
</tr>
</tbody>
</table>

The Kitchen category is also well-represented and includes wine bottle and drinking glass sherds. A range of ceramic ware types was present, including slipped tablewares, tin-glazed, creamware, pearlware and whiteware. The whiteware provides an 1815 TPQ for the assemblage. Other items included smoking pipes and buttons of various materials.
Feature 16 [2000] was a stone late-eighteenth to early-nineteenth century privy identified by its form and the presence of classic night soil. From within the privy, 610 artifacts were recovered (Table 6.02).

The assemblage contains relatively equal amounts of architectural (26.5%), kitchen (34%), and Food Related faunal remains (31%). Among the faunal remains are cattle, pig, chicken and fish. The identified fish species are local, Sheepshead and Mackerel. Very little clam and no oyster shells were recovered.

Table 6.02: Feature 16 [2000] artifact counts.

<table>
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<th>FUNCTIONAL GROUP</th>
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<th>PERCENTAGE</th>
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</thead>
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<td>26.5%</td>
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<tr>
<td>Activity</td>
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<td>3.11%</td>
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<tr>
<td>Food</td>
<td>189</td>
<td>31%</td>
</tr>
<tr>
<td>Personal/clothing</td>
<td>22</td>
<td>3.6%</td>
</tr>
<tr>
<td>Kitchen</td>
<td>207</td>
<td>33.9%</td>
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<tr>
<td>Unidentifiable</td>
<td>11</td>
<td>1.8%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>610</strong></td>
<td></td>
</tr>
</tbody>
</table>

The Kitchen assemblage includes wine bottle, wine decanter, and drinking glass sherds. Ceramic ware types present include whiteware, pearlware, creamware, and stoneware. Among the ceramics is a reconstructed green and scalloped edged pearlware plate (Image 6.05). This type was relatively inexpensive and quite common in the early nineteenth century. The whiteware provides an 1815 TPQ.
Two bone button blanks are part of the assemblage, along with three brass straight pins, smoking pipes, a single medicine bottle, and a whiteware chamber pot (Image 6.06). One artifact of note is a 1781 Carolus III coin, commonly known as a Spanish real, in a remarkably good state of preservation (Image 6.07). Interestingly, a Spanish real was also found in the first Almshouse deposit beneath City Hall.

One other interesting item found in this deposit are the remnants of what the Hartgen report terms “crown glass production”. Crown glass is a common form of window glass. However, it is more likely that these are remnants of window assembly and not the production process.


Feature 97 [1999] was a mortared stone wall with a small area of disarticulated human remains. Map analysis places it north of the eastern end of the Second Almshouse. A second feature, Feature 98 [1999], was uncovered running into Feature 97 [1999]. Feature 98 [1999] was a disturbed stone wall similar to Feature 97 [1999]. A third feature, Feature 100 [1999], consisted of a single course of mortared limestone that was cut into by Feature 98 [1999]. The limestone was arranged like flagstones and appeared to be of an earlier construction than Features 97 [1999] or 98 [1999]. There is not enough available information to definitively associate these three features with the Second Almshouse, but they appear to be part of a structure that was repaired or rebuilt on more than one occasion. There was no information regarding specific measurements, other construction information, or interior soils to determine if this area represented a privy location. It should be noted that these features lie within the vicinity of the Upper Barracks. The presence of disarticulated human remains may suggest a nineteenth century construction-date when burials were no longer occurring in the area.

_Constructing City Hall_

Less than 30 years after a new cistern was ordered to be built, the “first” Almshouse and, presumably, any associated disused structures were demolished. Instead of collapsing the Almshouse building in on itself, which was a common practice, the structural materials were removed from the site for reuse in Washington Square Park (Geismar 2005:7). Plans for the land on which the First Almshouse stood were quickly considered. In 1800, it was selected as the site for the “new” City Hall, as it was referred to in contemporary media.
By 1803, the area had been leveled and filled in. McComb refers to the site for the “new” City Hall as “Maiden Ground except the NW corner which stands on one of the Bridewell sinks which was well cleaned out, and filled in for about 4 feet with fresh earth well Rammed and wet” (McComb family papers 1787–1858).³

On April 5, 1803, workers began digging for the new building foundation and the cornerstone was laid. The soils encountered likely consisted of the fill soils associated with the Almshouse demolition and the natural top and subsoils. The “new” City Hall had a much larger footprint than that of the Almshouse and the natural soils encountered would have been poorly drained. The area had a high-water table, particularly on the north side of the site as it was closest to water bodies like the Collect Pond. Based on archaeological evidence and analysis, the water table was approximately 6’ below the 1803 surface.

The 1803 surface that McComb and the workers occupied was between 2.5’ to 3’ lower than the present day modern grade. On December 5, 1803, the basement story, the building foundation, and the basement walls had been built up according to plan and are noted as being 8’ feet above ground level (McComb family papers 1787–1858). Comparatively, the top of the basement level presently measures between 5.5’ and 6’ above the 2010 surface. This indicates that the floor of the basement was a mere 2’ below the 1803 surface and the foundation walls extended 5.5’ below surface, which is approximately half a foot above the water table.

³ This is another term for privy.
In excavating for the foundation, it appears as though a stone retaining wall (Feature 1 [2010]) was constructed around the north, east, and west sides of the proposed structure and probably the south side as well. This wall also cut into one of the eighteenth-century cisterns. Feature 33/35 [2010] was truncated and a portion of the new building foundation sat atop the southern edge of the cistern. The workers on site also used this cistern to dispose of their refuse, not dissimilar to the manner in which twentieth century construction workers dispose of trash in excavation areas.

An additional eighteenth-century cistern, Feature 2 [2010], appears to have remained relatively intact. City Hall’s foundation wall was built along the outside of the southern face of the cistern and the retaining wall was constructed up to its eastern edge (Image 6.08). It is possible, and plausible, that this cistern was used for ready access to water during construction.

The Feature 1 [2010] retaining wall created an areaway around City Hall’s foundation. Though photographs show an areaway surrounding City Hall as early as 1870 (Image 6.09), it is uncertain if it remained exposed upon completion of the original construction. The 1811 Commissioners Plan appears to show an areaway, though this is the only map to do so.
Image 6.08: Feature 2 [2010] and original City Hall retaining wall construction.

Image 6.09: Circa 1870 image of City Hall. The areaway is visible in the lower left corner of the photograph (New York Public Library Stereoscopic Views Collection).
Feature 1 [2010] was first identified at approximately 1.5’ below datum (bd) when fieldstones were exposed extending 0.66’ from the existing granite curb and associated circa 1950 concrete retaining wall of the areaway. These stones formed a mortared wall that continued to a depth of 5’ bd. The wall was present along the entire northeast length of City Hall except for the western end that was occupied by the brick cistern. The final length of the exposed wall measured 71’ (Image 6.10).^4

^4 Subsequent excavation would observe this wall along the northwest, west, and east sides of City Hall.
Based on its construction, the wall appeared to pre-date City Hall, leading to the initial hypothesis that it may be associated with the eighteenth-century Almshouse. The construction was vernacular, in that it made use of available materials, and there was a noted lack of uniformity among the shape and material of the stones. The mortar appeared to be consistent with mortars dating to the mid- to late-eighteenth century.

Compositional analysis of the mortar identified it as a sanded-lime mortar. However, this alone cannot provide a definitive date. “Lime mortars are even used today in restoration work. It is therefore difficult to pinpoint exactly when the Rubble Wall… in the archaeological site [was] built based on an analysis of the mortars alone” (JBC 2010).

Based on the above information and the juxtaposition of historic research and additional archaeological investigations around City Hall, it was ultimately determined that Feature 1 [2010] was a retaining wall built during the initial construction of City Hall. The wall was likely constructed in conjunction with the excavation for the basement of the structure beginning in 1803. The retaining wall possibly served as a means of supporting/securing the work area where the natural subsoils consisted of unconsolidated sands. The 1811 commissioners’ plan (Map 6.06) demarks an outline around the perimeter of City Hall that may be representative of the areaway.
Additional construction features were identified in the basement of City Hall. Seven stone features (6a.1–6a.7) were uncovered spanning the north-south length of the northeastern-most room of the basement. These were ultimately determined to be stone footings composed of two courses of dry-laid, undressed stone (Image 6.11). The stone was consistent with that used for City Hall’s interior support walls.
The stone footings were exposed throughout Rooms 6A and 6B and part of Room 8C. According to City Hall’s Executive Director for Facilities, Construction Management & Operations, similar footings were also observed beneath the basement floor in the north rooms on the western half of the building (Philip Kelly 2010, personal communication). With the exception of the wall supports, these footings consistently measured approximately 1.5’ wide and extended between 0.8’ and 1’ below ground (bg).

Image 6.11: Image of fully exposed stone footer within Room 6A.
The surrounding soils in Room 6A consisted of demolition fill containing a large amount of window glass. These broken fragments were likely waste from window repairs or replacement. Other materials mixed within were nails too rusted to determine their manufacture, brick fragments, and sherds of opaque frosted white lamp glass. In one area brick and cobble demolition fill was exposed. These bricks were not from the demolition of the Almshouse, as they were not consistent with eighteenth-century brick. Their degree of regularity in size and form dated them to the early-nineteenth century.

This demolition fill is likely associated with one of the many renovation phases of City Hall. Over the past two centuries there have been more than six renovation projects at City Hall (Table 6.03).

<table>
<thead>
<tr>
<th>Renovation Date</th>
<th>Architect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1860</td>
<td>Leopold Eidlitz</td>
</tr>
<tr>
<td>1898</td>
<td>John H. Duncan</td>
</tr>
<tr>
<td>1902</td>
<td>William Martin Aiken</td>
</tr>
<tr>
<td>1907, 1912, 1915, 1917</td>
<td>Grosvenor Atterbury</td>
</tr>
<tr>
<td>1956</td>
<td>Shreve, Lamb &amp; Harmon</td>
</tr>
<tr>
<td>1998</td>
<td>Cabrera Barricklo</td>
</tr>
</tbody>
</table>

Renovations within City Hall’s basement do not appear to have altered the floor level. Plans from the 1902 William Aiken renovation, which replaced the basement floors, specifically note that the floors were to be relocated to their original level. The plan notes state that cinders would be used as fill to facilitate any leveling. This information aided in determining differences in elevation between 1803 and the present-day as well as interpretations of some features.
The stone footings appear to be original to the construction of City Hall based on their similarity to the inner wall supports. Stone footings were used to separate or raise floor joists from the soil surface. This allows for the free flow of moisture beneath a structure and distributes the load.

Similar construction was discovered during excavation of the Old Provo Tabernacle in Salt Lake City, Utah, built between 1856 and 1861 (Morganegg 2012).

Aside from the building itself, there were also exterior architectural features recovered that are no longer extant or utilized and multiple artifact deposits. Among the earliest features associated with City Hall are trash deposit or midden features from the 1803 – 1811 construction period. Feature 28 [2010] was a large trash deposit dating to the period of construction. Other deposits likely related to workers on the project were documented in the area behind the northeast wing of City Hall.

*The Builders and Construction Workers*

Feature 28 [2010] is the second largest trash deposit to have been recovered from this site; it is comparable in size to 1999’s Feature 87/88/99. Located to the northwest of City Hall (Map 6.07) the top of Feature 28 [2010] was exposed at 2.5’ below surface (bs) having been impacted by early twentieth century construction and extended to 5’ bs. Though the feature spanned 17.4’ east to west and 7.2’ north to south, it still extended beyond the construction limits. Based on the documented physical extent of the deposit, it may have possessed either a rough ovoid or rectangular form.
Archaeological excavation and artifact analysis gathered much information regarding Feature 28 [2010]. The 20,225 artifacts recovered -- 11,292 of which were faunal fragments -- generally pre-date the construction of City Hall.

As Feature 28 is adjacent to the Bridewell, which occupied the area to the west of City Hall from 1775 to 1838, it could be associated with the prison. The journal of John McComb Jr., the architect of City Hall, refers to several large “sinks” (large privies) associated with the Bridewell that were filled in prior to City Hall’s construction (McComb Family Papers 1787–1858). It was possible that Feature 28 [2010] represented one of these “sinks,” though these were reportedly cleaned out and filled with clean earth prior to the construction of City Hall (McComb family papers 1787–1858). Also, based on McComb’s description, a privy would have sat beneath the northwest corner of the present-day City Hall foundation. Another possibility is that the feature represents a midden used by workers during the construction of City Hall. It could also be associated with the Bridewell.
Map 6.07: CHARM layer depicting the location of Feature 28 [2010].
Ultimately, analysis determined that Feature 28 [2010] was not a privy as it lacked key characteristics: the soil within was not night soil, it was not wood lined, and there was no regularity of form. Further, floated soil samples showed no evidence of seeds or other organic material typically associated with a privy. The deposit did contain, however, a relatively large amount of fine household ceramics and personal items. The presence of many finely decorated ceramics, wine/beer bottles, and smoking pipes suggests that the feature was also not associated with the Bridewell. Evidence pointed toward an association with a different population and/or singular event.

Four horizons were documented within Feature 28. Strata I, II, and IV are consecutive stratified deposits; Stratum III is a horizon that apparently “lines” the outer face of the midden. Based on the profiles (Map 6.08/Image 6.12), it appears that Strata II and IV were deposited onto Strata III. Stratum IV lay directly upon sterile subsoil.
Map 6.08: Features 28 [2010] and 29 [2010], Profiles of Southern Walls
The relatively thin profile of Stratum III and the high concentration of charcoal and ash therein indicate that the midden was originally utilized for cooking and/or heating. It is also possible that the moderate amounts of such remains within the feature were the result of convenient disposal practices. If this is true, the deposited remains constituting Stratum III clung to and lined the sides of the hole and the remaining strata were deposited on top. Based on the stratigraphy and the assemblage data, all strata were deposited within the same time period.

Stratigraphically, Feature 28 exhibits little evidence of being an accretionary deposit. The majority (approximately 80%) of the Feature 28 [2010] assemblage was recovered from Stratum II, which possessed higher artifact content than soil matrix. Evidence suggests a short-term deposition. The size of the deposit, including the large amount of faunal remains, suggests that it came from multiple persons, a community or a large event.

Even though the full extent of Feature 28 [2010] was not documented, it contained over 20,000 artifacts and was almost certainly a primary deposit dating to the first decade of the nineteenth century. The TPQ for the main portion of the deposit (Stratum II) is 1803. Table 6.04 provides the TPQ for each excavated stratum.

Table 6.04: Feature 28 TPQ dates.

<table>
<thead>
<tr>
<th>Stratum</th>
<th>TPQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>1800</td>
</tr>
<tr>
<td>II</td>
<td>1803</td>
</tr>
<tr>
<td>III</td>
<td>1805</td>
</tr>
<tr>
<td>IV</td>
<td>1795</td>
</tr>
</tbody>
</table>
Food Related faunal remains account for more than half of the assemblage (56%) and Household artifacts 28%. Table 6.05 and Figure 6.01 present a breakdown of the artifact count and contributing percentages by functional group. The Household remains account for two-thirds of the non-faunal assemblage. Among the 17 identified functional groups represented, only Food Related faunal remains, Household artifacts, Architectural remains, and Personal items were numerous enough to efficiently chart. The 12 remaining functional groups only comprised 2% of the whole.

Table 6.05: Feature 28 Artifact count by functional group.

<table>
<thead>
<tr>
<th>FUNCTIONAL GROUP</th>
<th>ARTIFACT COUNT</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural</td>
<td>1781</td>
<td>8.8%</td>
</tr>
<tr>
<td>Arms</td>
<td>1</td>
<td>.005%</td>
</tr>
<tr>
<td>Commercial</td>
<td>2</td>
<td>.009%</td>
</tr>
<tr>
<td>Debitage</td>
<td>1</td>
<td>.005%</td>
</tr>
<tr>
<td>Food Related</td>
<td>11292</td>
<td>55.8%</td>
</tr>
<tr>
<td>Fuel</td>
<td>29</td>
<td>.14%</td>
</tr>
<tr>
<td>Hardware</td>
<td>5</td>
<td>.024%</td>
</tr>
<tr>
<td>Household</td>
<td>5738</td>
<td>28.37%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>138</td>
<td>.68%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>3</td>
<td>.014%</td>
</tr>
<tr>
<td>Medical</td>
<td>24</td>
<td>.11%</td>
</tr>
<tr>
<td>Other</td>
<td>64</td>
<td>.31%</td>
</tr>
<tr>
<td>Personal</td>
<td>1093</td>
<td>5.4%</td>
</tr>
<tr>
<td>Sample</td>
<td>13</td>
<td>.064%</td>
</tr>
<tr>
<td>Sanitary</td>
<td>34</td>
<td>.16%</td>
</tr>
<tr>
<td>Storage/Cooking</td>
<td>2</td>
<td>.009%</td>
</tr>
<tr>
<td>Toy/Recreation</td>
<td>5</td>
<td>.024%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20225</strong></td>
<td></td>
</tr>
</tbody>
</table>
The faunal remains suggest some dietary variety: beef supplemented by shellfish, fish, and poultry.

Full ranges of skeletal elements are present in the assemblage. Of particular note were the presence of complete or near-complete cattle skulls; cattle and caprine cranial elements were also found.

The bulk of the Food Related faunal remains were only identifiable to the class level. Of the identified species, cow is the most represented (15.3%). The large quantity of saw and chop marks found on bones from this feature indicate primary butchering practices, rather than what would be expected for secondary household kitchen butchery.
Also of note is the significant percentage of vertebrae of the butchered cattle bones (34.6%) present in the assemblage. The distribution of vertebra type showing evidence of butchering is of interest. Cervical, including the axis and atlas vertebrae, were the most prevalent, accounting for almost 80% of the bones from this group. Thoracic, lumbar, and sacral vertebrae, while present, constitute much smaller percentages of the butchered vertebrae. The high number of vertebrae points to the slaughter of cattle within the city, rather than the provisioning of cattle parts butchered elsewhere.

Bird species and fish are also fairly well represented, accounting for 7.6%, and 12.8% of the non-shell faunal assemblage. Shell was sampled and was found to consist mostly of hard shell clams (quahogs) and oysters, both within the mollusk phylum. Among the less represented species are turtle ($n=8$) and one crab shell fragment. Turtle was considered a luxury food item in the eighteenth and nineteenth centuries (Schweitzer 2009). The remainder of the Food Related group consists of sixteen peach pits and an eggshell fragment.

There is a wide range of household wares in the deposit. These include various tablewares, but lack a significant percentage of utilitarian wares. Forms include cappuchines, flacons, condiment bottles, a punch bowl, several teapots, and pitchers—decidedly high-end forms/types, suggestive of a more privileged population. Within the household group, most of the artifacts consist of ceramic sherds (62%).
Refined earthenwares comprise the bulk (81%) of the ceramic assemblage. Smaller amounts of coarse earthenware (16.6%) and stoneware (4%), which generally account for utilitarian wares, were recovered. Among the refined earthenwares, creamware was the most common ware type, comprising 64% of the total.

Most of the creamware specimens are undecorated and fall within the general date range for this ware type (1762-1820). However there were several that provide tighter date ranges and cultural information.

Even though undecorated creamwares do not often assist in tightening date ranges, in this case they do offer some significant information concerning the history of City Hall Park. First, creamware’s production pre-dates the construction and occupation of the new City Hall. Therefore, these fragments could very well have been deposited before construction began in 1803.

The variety of vessels types is also interesting. The creamware assemblage includes identifiable portions of saucers, mugs, plates, platters, and teapots, indicating the use of a wide range of creamware vessels that could point to multiple place settings. Unfortunately, the relative dearth of cross mends makes such a supposition problematic. Further, creamware vessels were not sold as discrete service sets, but rather by the half-dozen or piece. Therefore, these creamware sherds represent an amalgamation of many separate vessels acquired over time instead of a single, complete-set purchase.
It is also unlikely that the creamware vessels were used by the Bridewell. Tableware was not generally provided to seventeenth- and eighteenth-century prisoners by the institutions. Instead, pieces were either donated by the public or came with specific prisoners (Katkins in process; Johnston 2010:22–23). Though it is certainly possible that complete sets of creamware and other ceramics were given to the prison, it is doubtful given the practices of the time. Instead, prisons and other institutions usually acquired individual vessels, or the unbroken “odds and ends” left over from older or unfashionable sets. The cohesiveness of the assemblage points away from an association with the Bridewell.

Among the creamware sherds with tighter date ranges are molded shell-edge rim, which was prevalent from 1774–1800 (Miller et al. 2000). There are seven undecorated sherds that mend into three plates exhibiting the “DD & Co. Castleford” maker’s mark. This mark refers to David Dunderdale & Company potters, which was started by Dunderdale in Castleford (Yorkshire) circa 1790. Dunderdale’s wares were highly valued throughout the late-eighteenth and early-nineteenth centuries, especially in Portugal and Spain. Unfortunately, French privateering during the Peninsular War adversely affected his trade with these countries. The business suffered and Dunderdale retired and closed the manufactory in 1820 (Godden 1994; Grabham 1916). There are thirteen dipt sherds that exhibit various colors dating between 1770–1820 (Rickard 2006). Lastly, there are eight sherds with floral designs painted over the glaze. Overglaze painting on creamware dates to circa 1765–1815 (Miller et al 2000).

There are many sherds with molded patterns. While these fall within the standard creamware date range, such specimens can usually provide additional data regarding consumption patterns or
number of vessels/table settings. More than half of the molded pattern sherds were identified as Royal pattern.  

Two of these Royal pattern sherds exhibited a shallowly impressed “WEDGWOOD” maker’s mark. The remaining molded sherds exhibit the large variety of potential vessels recovered from the midden. The diversity of molded patterns is probably due the ware’s popularity and low price around the turn of the century. By 1790, creamware was the cheapest of the refined earthenwares (Miller et al. 2000:12) and widely available in America.

Twenty-six of the creamware sherds were decorated via bat printing. The scenes from these bat-printed sherds warrant mention. Six of the sherds are from a pitcher that depicts the Royal Hospital for Seamen in Greenwich, England (Image 6.13). Queen Mary II founded this institution, designed to house injured British sailors, in 1694. Other scenes of a ship(s) and a smiling figure (possibly a sailor) may be related to the Greenwich Hospital jugs, as the hospital and pensioned sailors were common bat-printed scenes (Port Cities London 2012a, b).

Other scenes include landscapes. Ten sherds, which mend into three jugs, depict a pastoral scene within a large central medallion. The words “SHEP…/Reclin’d …He sweetly p… In praise…” are located beneath the scene. This phrase may be biblical or a Grecian idyll. Five sherds from a large strap-handled mug also depict a pastoral landscape.

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5 This pattern was the most common of creamware patterns and was produced extensively. It is very possible that the undecorated sherds are also remnants of Royal Pattern vessels.
The pearlware assemblage also demonstrates a variety of vessel types and decorations indicating the usage of a wide variety of pearlware place settings, or pieces, from multiple services. One sherd represents a green shell-edge baker; this variety of pearlware was prevalent between 1800 and 1835.

Close to half of the pearlware assemblage consists of painted specimens, most bearing polychrome designs painted under the glaze. This style of pearlware decoration was prevalent between 1795 and 1830 (Miller et al 2000). The remaining pearlware sherds consist of blue-painted under the glaze designs. Blue underglaze painting began twenty years earlier than the polychrome variety (Miller et al. 2000).
A molded pearlware known as the Pratt Type, which consists of molded designs painted with earth tone colors, is also present. This style was popular between 1780 and 1840 (Lewis and Lewis 1993). There are pearlware sherds that exhibit the narrow style ribs below the rim that are usually associated with molded creamware. These may be early examples of pearlware.

Painted China glaze pearlware was also recovered. Most of these sherds exhibit portions of either Chinoiserie or House & Tree patterns. Blue-painted China glaze with Chinese motifs was only manufactured from 1775–1810 (Miller et al. 2000; Miller 1987:87; Miller and Hunter 2001).

Eight pearlware sherds exhibit blue underglaze stippled printing. This style of decoration was prevalent from 1803 to 1830 (Miller et al. 2000). Most of those sherds exhibit what is best described as the Chinoiserie pattern, but may be either a Willow Pattern derivation or imitation. These sherds provide the 1803 TPQ for the assemblage. There is a single blue sponged pearlware sherd with a later date, but this is considered intrusive along with a sherd of a ceramic water pipe.

Although possibly still available in local stock, the China glaze noted above was probably not deposited post–City Hall. When combined with the TPQ of 1803 for the assemblage, deposition within the first decade of the nineteenth century during the construction of City Hall can be inferred.

There are many painted specimens along with the dipt and the China glaze examples. In any other locale, the sheer variety of decorations would argue for deposition from multiple sources over a long time span—a public midden, possibly. Standard ways of analyzing and interpreting
assemblages, however, do not necessarily apply here. This midden deposit was located adjacent to an eighteenth-century prison, which was not easily accessible. Even if reachable, it seems unlikely that the public would venture to the boundary of such an institution. The midden was also adjacent to an active construction site, also not an area which the general public would have frequented. The TPQ date of 1803, combined with the presence of many similarly aged specimens, further contributes to the assessment that this deposition probably occurred during the construction of City Hall.

Of interest are seven sherds from a vessel that exhibits a portrait of George Washington. This vessel was a tall mug with a plain strap handle (Snyder 1995:9). Early-nineteenth century deposits from South Street Seaport also contain ceramic wares with Patriotic decoration. New York City was the first capital of the United States following the conclusion of the Revolutionary War and its first President resided nearby. Recent work by Dr. Kariann Akemi Yokota (2014) further explores the development of an American identity and the role of both the British and Chinese ceramic markets in providing wares with patriotic designs. In essence, profit trumped loyalty and the British pottery industry helped to encourage the growth of an American identity by producing ceramics depicting nationalistic scenes that individuals could consciously purchase and display.

In addition to tablewares, teawares are also present. Thirty-two sherds of engine-turned, refined red-bodied ware were recovered. All of these sherds are engine-turned, which has left either bands reminiscent of basket weave, wavy lines, or scalloped lines upon the sherds. These sherds represent at least two creamers and several teapots. Refined red-bodied wares were prevalent from 1760–1830 (Hawkins 1999; Rickard and Carpentier 2004).
Two other varieties of teaware are temporally diagnostic. The first consists of four sherds from two to three black basalt stoneware teapots. This ware type was prevalent from 1750 to 1850 (Miller et al. 2000: 10). One sherd exhibits acanthus leaves over a stippled background; the other exhibits a ribbed base and spout and is decorated in a geometric pattern. The second diagnostic variety consists of six sherds of white salt-glazed stoneware. This white-bodied stoneware was designed to emulate Chinese porcelains. In general, white salt glaze was prevalent from 1720 to 1805 (Miller et al. 2000).

Coarse earthenwares, which are most commonly used for utilitarian vessels as opposed to refined, were also present in the assemblage (n=567). The greater portion of the sherds recovered were redware; the remainder were British buff-bodied slipware.

The redware sherds were divided almost evenly between undecorated lead-glazed and slip-trailed under a lead glaze. Designs include Trailed Slip (the most common), Dot, Marbled. Trailed & Combed Slip, Dot & Trailed Slip, and Joggled Slips. Generally, redware, due to its long production, cannot provide distinct chronological information. However, the slip decoration can be loosely dated as its popularity ended circa 1870 (Denker and Denker 1985:54–68).

The British Buff-Bodied Slipwares are decorated via trailed slip and seven of the trailed sherds possess coggled rims. This ware type was prevalent from 1670 to 1795 (Azizi et al 1996) and most likely originally dates to pre-Revolution New York.
For the most part, the redwares are utilitarian wares that would have been utilized as cooking and serving dishes for daily meals. A few exceptions do exist as there are three sherds that appear to have been modified into gaming pieces/counters.

One redware sherd may point to association with the Bridewell: the base of a slip-decorated/combed redware dish that has been inscribed. Several markings were done post manufacture into the unglazed base of this dish (Image 6.14). The markings appear to be either an “A” with another “A” superimposed above or, possibly, a star or multiple “X”-shaped. These markings could be the result of a Bridewell prisoner marking the object as owned. A glass tumbler found in the Bridewell assemblage was incised with an “X” on its base. See Chapter 5, p. 208-209 for a discussion on the meaning of the “X” mark.
Most of the 147 stoneware sherds recovered from the assemblage are from salt-glazed vessels with gray to buff-colored bodies produced between 1720 and 1820. The remainder of the stonewares consists of the previously mentioned white salt-glazed stoneware and black basalts.

Eight of the stoneware sherds are from salt-glazed vessels decorated with blush blue clouds. This style of decoration indicates manufacture at the Crolius and Remmey pottery, which was located on nearby Pot Bakers Hill north of City Hall Park. This particular decorative style was popular from 1785 through 1820 (Janowitz 2008). An additional eighteen salt-glazed sherds exhibit kiln damage that consists of underfiring, kiln marks, and/or incomplete salt glazes. This
damage indicates that they too are of local manufacture as it is unlikely that such merchandise would be shipped across the Atlantic. Seventy-two stoneware sherds are from buff-bodied, salt-glazed vessels whose place of manufacture cannot be determined.

Of the 117 porcelain sherds recovered, 53 exhibit sufficient characteristics to assign date ranges. All of the temporally diagnostic porcelain sherds are painted Chinese export porcelain. One of these diagnostic sherds is from a Chinese export sauceboat with an *encre de chine* (India ink) floral scene and gold highlights painted over the glaze. This variety of Chinese export porcelain was prevalent between 1720 and 1800 (Azizi et al. 1996).

A total of 2,139 glass bottle and container sherd were recovered. The bulk of these sherds do not possess enough diagnostic characteristics to assign complete date ranges.

In general, household glass is best dated when nearly the entire vessel is present. Much documentary evidence is available about when certain molds were utilized, or how and with what tool necks and lips (finishes) were attached to bottle bodies. Unfortunately, most assemblages consist of fragments that do not possess these necessary characteristics. In these instances, assigned date ranges are either rather long or incomplete. For instance, one can tell that a bottleneck was mouth blown into a mold, but cannot tell the exact mold type because the base is missing. Therefore, the only ascribable date is 1920, which is when machine-made bottles became widely available (Miller et al 2000). As another example, if the pontil mark -- a distinctive spot where the blower’s glass rod was removed from the base of the bottle -- is the only diagnostic feature visible, only a date of 1870 can be assigned. This is because, by 1870, empontilling had
generally been replaced by snap cases (Jones et al. 1989). Researchers know that the bottle was made prior to 1870, but without mold patterns or other information, cannot give a more definitive date.

To avoid incomplete or wide date ranges for this analysis, the bottle and container glass assemblage was compared to data compiled in Olive R. Jones’ 1986 article “Cylindrical English Wine and Beer Bottles, 1735–1850,” and her 1985 joint article with E. Ann Smith titled, “Glass of the British Military, ca. 1755–1820.” Jones (1986) looks at both dated and undated British wine and beer bottles seeking similarities among various characteristics, especially the “finishes” (lip and rim).

Although the sample size in her article is small, Jones’ conclusions are essential to explaining the glass artifacts recovered in City Hall Park. The long British presence in Manhattan left an indelible mark upon the material culture of the city; British influence was still noticeable even when construction of City Hall began. Notably, the level of British imports post-war outpaced pre-war levels as America did not have the infrastructure for large-scale manufacture (Yakota 2014 and Chrysalis Archaeology 2017). As the bulk of the recovered artifacts are British imports, utilizing a study that focuses on these types of vessels is logical. Recovered bottles from intact horizons in City Hall Park in large part exhibit the same characteristics that Jones noted in her study.

There were four sherds that had characteristics that could be associated with definitive dates. The first is a mouth-blown bottle sherd with an applied, downturned v-shaped string rim, a style popular circa 1780–1820 (Jones 1986; Jones and Smith 1985:21). This is likely a beer bottle. The second diagnostic glass artifact consists of a mold-blown sherd with an applied rim that slopes downward
and has a flattened string rim beneath it. In general, this neck/finish style was popular from 1770 to 1785 (Jones 1986:8, 44). The third is a large, square, non-lead decanter with an engraved tulip design. This design was popular between 1760 and 1820 and may indicate that the vessel was manufactured in either New York or Philadelphia (Palmer 1993:92–93). The final dateable sherd comes from a dip molded case medicinal bottle. Although dip molds are first introduced circa 1730 and used until circa 1870, the gradual replacement of this manufacturing technique began in 1821 when the Rickett’s three-piece mold was introduced (Miller et al. 2000: 8; Jones and Sullivan 1989).

Twenty-two of the bottle/container sherds were blown into a mold and possess applied rim/finishes. The finishes have lips that are either equal or dominant to the string rim; the lips and string rim were downtooled and exhibit a distinct space between them. This style of bottle was popular between 1790 and 1820 (Jones 1986: 21, 44). Three sherds of non-lead glass are most likely from a stemmed trumpet-shaped bowl(s). One sherd has white lines on the interior of the bowl and patinated stress lines. Based on the stem type, these sherds may be from a German-style vessel(s) manufactured at Amelung, Maryland (Noel Hume 1988:191).

Six sherds from tumbler(s) with polychrome painting were also found. These decorations consist of a wavy band below the rim and a floral motif on the body and are painted in white, yellow, red, and blue enamels. The vessel(s) is probably of European (German or Bohemiam) origin and dates from 1775 to 1825 (Palmer 1993: 88–89). Seventeen of the bottle/container sherds were also blown into molds and possess applied rims/finishes. These had different lip/rim characteristics, which date them somewhat earlier. The sherds exhibit v-shaped lips that are basically the same
thickness as their necks and downtooled string rims. These characteristics were popular on bottles from 1770 to 1785 (Jones 1986: 20, 44).

Forty-three sherds of various engraved tumblers and decanters were recovered, all exhibiting designs that can be described as “Stiegel Type,” after the Manheim, Pennsylvania glassworks of Baron Stiegel. These particular specimens were probably made in New York City, Philadelphia, or Bohemia and emulated the Stiegel variety of mold-blown and engraved glass (Palmer 1993: 92–93; McKearin & McKearin 1978: Plate 35 #1).

The non-diagnostic glass sherds are from a wide variety of objects: bottles, stemware, tumblers, vials, mugs, and decanters. Although definitive dating was not possible for this portion of the assemblage, the sheer variety of glass artifacts is telling. It points towards a large-scale consumption of a great variety of foodstuffs and potables. An interesting item is a flacon, a bottle used for fine oils or condiments.

Other Household artifacts were also recovered, including two fragments of a metal basin, four fragments of a large kitchen knife blade, and five fragments of a bone knife or utensil handle. One of the bone handles exhibits an incised “X” and another exhibits a carved checkerboard pattern (Image 6.15).
Like most of the midden deposits from this site, there were a fair amount of architectural remains. Almost all (89.7%) consist of fragments of window glass fragments. The only temporally diagnostic artifacts are fifteen cut nails and a fragment of sewer tile. The fragment of sewer pipe is impressed with the name of Greenwich Pottery and the words “steam pressed ironstone.” Greenwich Pottery operated out of Greenwich Village and introduced steam-pressed sewer pipes into Manhattan circa 1851 (Windsor and Kenfield et al. 1894, 1897:270). This is a portion of the sewer pipe that impacted the southern portion of the midden; therefore, it is intrusive and will be dismissed.
The majority of the cut nails recovered are too corroded to determine whether or not their heads
were attached via hand or machine. As cut nails are still utilized in certain industries today, only
the beginning date of 1790 (Miller et al. 2000) can technically be ascribed to this portion of the
assemblage.

Seventy hand-wrought nails were also recovered. As this is an ancient manufacturing technique,
ascribing a beginning date is problematic. Additionally, their usage technically overlaps that of
cut nails and continues into the present. However, as they were found in City Hall Park, they
logically must date to an episode of construction. The first documented building within City Hall
Park was the De Wit and Hartogvelt gristmill, built between 1663 and 1723. The wrought nails
could possibly date to this period. More likely, they date to the period of City Hall’s construction.
The wrought specimens outnumber the cut varieties by roughly five to one and were found in the
same context. This may indicate that both varieties were utilized at the same time, but the wrought
variety was still more readily available. As City Hall’s construction began around the time that
cut nails were beginning to supplant wrought nails, and there are a greater number of wrought
nails, it can be assumed that the wrought nails in question date to this time period.

It is notable that there was a forge at the Bridewell where prisoners made nails. Though there is no
direct evidence, it is possible that nails forged at the Bridewell were used in the construction of
City Hall. This is an aspect that warrants further research.
Of particular note within the collection are small finds. In this densely occupied, relatively small property, it is at times the anomalies that provide noticeable distinctions. An example is Personal items, which are fairly well represented. The bulk of the personal items consist of fragments of smoking pipes (92%), though relatively few proved to be temporally diagnostic. Two pipe bowls can be dated via recourse to an Atkinson and Oswald 1969 article entitled “London Clay Tobacco Pipes,” which has been adapted by the Digital Archaeological Archive of Comparative Slavery into a tobacco pipe cataloging manual (Grillo et al. 2003). The pipes with a thin, brittle bowl and a flat-based spur are circa 1780 through 1820 (Grillo et al. 2003: 11–12). A third diagnostic pipe bowl has an identifiable design: a distinctive Dutch bowl shape that depicts the coat of arms of the city of Gouda on either side of the heel. The heel itself has “666” inscribed and the rim is rouletted. This variety of tobacco pipe was available from 1745 to 1812 (van der Meulen 2003).

Two other decorated pipes are also of note. The first depicts an aboriginal figure on the side of the bowl (Image 6.16). This figure has an upright crested headdress and is wearing a loincloth. Beneath the figure are five extant molded letters. The first three appear to be “N..R..I.” The fourth is either a “C” or possibly an “O.” The fifth, which is rather indistinct, may be an “A.” A whirled ovoid shape is beneath the letters. The reverse of the bowl depicts a shield/coat of arms. The details are somewhat indistinct, but two elements are discernible. The first is a small hoofed animal, possibly a horse or a doe, located in the lower left quadrant of the shield. The second appears to be a set of antlers that crown the shield. It is assumed that the central portion of the shield may have once portrayed an antlered animal. The aboriginal figure resembles eighteenth-
century depictions of Native Americans. It is hypothesized that this pipe may be related to Saint Tammany and the Tammany Society, founded in New York in 1789 (Janowitz 2013).  

The second decoration also appears to be related to a fraternal society and is seen on several of the pipe bowls. This decoration depicts the angle and level symbol of the Masons on the sides of the bowl and a large antlered stag or deer head facing the smoker (Image 6.17). Garlanding is exhibited throughout. The Masons were likely represented among the workers building City Hall and the elected officials overseeing its construction. John McComb, City Hall’s architect, was a stone mason and part of the Masonic order (Janowitz 2013 and Guerin 2015).

Image 6.16: Pipe bowl fragment with aboriginal figure, possibly representing St. Tammany.

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6 The Tammany Society was a New York City political organization.
The remaining Personal artifacts consist of bone or copper alloy buttons, a copper-alloy clothing fastener, an iron clothing hook, a carved bone comb, a pocketknife, a glass cane fragment, and a slate pendant. The bone comb is curved and could possibly be a decorative accent instead of being solely utilitarian. The pocketknife consists of a folding knife with bone handles. The handle portions exhibit rough incised cross-hatching.

The rectangular slate object may be a pendant (Image 6.18). It measures 1.4” long by 0.9” wide by 0.13” thick. A drilled hole is offset on one of the narrow (width) ends, most likely for a thong or some other means or wearing the item around one’s neck or wrist. The obverse appears to be thumb worn and the reverse exhibits damage near the drill hole. It is possible that this pendant was actually a slate marker (i.e., carpenter’s pencil) or tally keeper, as this lithic material was used in historic pencils. The fact that the edges appear worn down could attest to this possibility. On the other hand, the apparent thumb wear on the obverse is oriented towards the thong hole as opposed to a usable edge. This would indicate that the item was gripped with the thumb oriented upward towards the thong, which would preclude usage as a “pencil.” The worn edges may just
be generalized wear due to the softness of the lithic material. It seems more likely that this item was worn around the neck and gripped/rubbed during anxious moments by the owner, thus causing the noticeable wear.

The glass cane fragment is colorless and is from a curved portion of the cane’s handle (Image 6.19). The glass itself possesses a decorative twist. Items such as this cane are generally called “whimsies” and were the product of “end of the day glass,” the unusable excess left in the kiln at the end of a glassblower’s day. Many glassworks owners allowed their glassblowers to use this excess glass to create items for home use, as gifts, or possibly to sell. During the nineteenth century, glass canes were carried by men in various parades.

Other small artifacts recovered are two fragments of flint. The first is a honey yellow spall from a French gunflint. The second is a gray colored spall, which is either of British or local flint.

Two coins were also recovered. The first is half of a large copper alloy coin. Though it is too corroded to identify the type and date, its size may indicate that it is a tuppence. The second is a white metal coin too corroded for identification.

Another interesting object is a semi-circular iron strap that may be a portion of a manacle. One end of this thick, corroded artifact has an encrustation that may be either the remains of a hinge or an attachment point for a chain (Image 6.20). This artifact could also be a portion of a leg iron. As the midden is adjacent to the Bridewell, it would not be unexpected to find artifacts related to the prison. A similar item was found in the adjacent Feature 29 [2010].
Image 6.18: Slate Pendant or Marker.

Several Medical related items were recovered, mostly bottles and vials likely associated with self-medication. These are all fragmentary vessels and the ultimate manufacturing technique, and thus date range, cannot be discerned. The only temporally diagnostic artifacts consisted of two sherds from a creamware (1762–1820) ointment pot. Sanitary objects include several chamber pots and three bone toothbrushes.

One particularly interesting object is an early vaginal irrigator or syringe, made of bone (Image 6.22). It consists of a 3.5” long by 1” diameter polished hollow-bone cylinder. The ends of the cylinder possess inset external threads, which allow the end caps to seal flush with the cylinder. Two end caps were recovered with this item. The first is a simple cap that is slightly rounded with its center pierced by a 0.26” hole. The second cap is more elaborate; it consists of a rounded dome (0.92” diameter) with seven perforations and an incised circle. The incised circle is roughly half
an inch in diameter and occupies the center of the dome. Six of the perforations are spaced evenly around this circle in a hexagonal shape. The seventh perforation is located in the center of the circle/hexagon. The final part of this item consists of a 3.15” long by 0.23” diameter bone shaft with external threads on either end. This is most likely the central shaft portion of a plunger. The shaft would have passed through the simple cap’s central hole and been secured using an internally threaded handle. The other end would have been threaded to a plunger head, which may have also been constructed of bone. This item would have been used for contraceptive purposes or the treatment of venereal disease. The irrigator would have been filled with a cleansing liquid or powder, which would have been expelled by the pressing of the plunger (Peck 2012; Geiger 2014).

Among the remaining sanitary artifacts is a fragment of a bone toothbrush head and several chamber pot sherds.

There are five Recreational artifacts: two marbles and three redware gaming pieces (Image 6.21). The gaming pieces are formed from sherds of coarse earthenware. The first gaming piece is a rough pentagonal shape that is 1” diameter, the second is a small triangle with a notch at one end, and the third appears to be a smaller version of the former example. These items are not uncommon and have been found in many archaeological sites in the United States.

Another interesting object, classified as Other, is an almost complete cow hyoid bone with a precisely carved/incised symbol resembling an “M” on the central section (Image 6.23). While we assume this to be the letter “M,” it could possibly be the runic symbol “eoh,” which means horse, or the upper case Greek letter, Sigma. This bone item may have been perforated, possibly to wear as a pendant, but the ends are damaged.
Image 6.21: Bone Vaginal Irrigator

Image 6.23: Hyoid bone with an incised symbol that may have been worn as a pendant.
Though the assemblage is largely interpreted as being the product of persons associated with the construction of City Hall, it undoubtedly contains materials from the Bridewell residents as well. Why the deposit was used for a short period of time is uncertain, though there are some hypotheses. For instance, the deposit may be associated with some event that necessitated a cleanup of the area. One such event could be the yellow-fever epidemic in 1805. The epidemic halted construction on City Hall as the workers fled (McComb family papers 1757–1858). A cleanup of the site during this period could possibly explain the presence of multiple cats and dogs in the assemblage. Another possibility for the tight-framed deposition was for the inevitable cleanup of the site leading up to the opening ceremonies for City Hall in 1811, or perhaps an Evacuation Day celebration.

An additional possibility is that this assemblage was created by the celebration that occurred after the cornerstone was laid for the new City Hall. The stratigraphy suggests the pit could have been used for cooking as it is lined with ash and contains a large number of faunal remains representing several, if not complete, portions of animals. The ceramic and glass assemblage support a fine dining event.

Regardless of the event, this feature is the result of a single celebratory occasion. It is also one of the few tightly dated deposits recovered from within City Hall Park and reflects the transition from non-public to public use.
Adjacent Feature 29 [2010], though not physically part of Feature 28 [2010], is clearly associated with the larger midden. The recovered diagnostic artifacts indicate a similar depositional timeframe: the construction period of City Hall. Additionally, ceramic vessels cross mend between the two features, offering further evidence for concurrent deposition.

Feature 29 [2010] was encountered closer to the surface than Feature 28 [2010] and it gradually sloped down to the west, eventually reaching the same general depth as Feature 28 [2010] (2.7’ bs). This difference in depth is due to the western portion of Feature 29 [2010] not having been impacted by modern utility conduits. There was also approximately 1’ of sterile subsoil between the features. Excavation of Feature 29 [2010] was limited to the boundaries of construction excavation, but it continues east and is assumed intact within the neighboring green space.

Feature 29 consisted of one stratum (Stratum I) from which a total of 1,210 artifacts were recovered. The bulk of the assemblage consisted of Household artifacts (75.7%), followed by Personal items (10.91%), and Architectural remains (9.75%). All of the Food Related remains consist of bivalve shells. Six of the shells are from oysters; the remaining four are Quahog clams.

Of the 728 ceramic household artifacts, 53% are refined earthenwares. Most of these (74%) are from creamware vessels. The bulk of the creamware consist of undecorated body sherds. Three creamware sherds exhibit a “DD & Co. Castleford” maker’s mark.

Four printed pearlwares provide an 1803 TPQ for Feature 29 [2010]. Similar pearlware sherds also provided the TPQ dates for Feature 28 [2010], further indicating concurrent deposition.
Only three of the 188 glass sherds recovered were temporally diagnostic. The first two are from a mouth-blown vessel with an applied rim exhibiting a v-shaped lip that is basically the same thickness as the neck and a flat string rim. This variety of bottle was prevalent from 1770 through 1785 (Jones 1986: 20; Jones and Sullivan 1985: 39). The third is a basal sherd from an engraved mouth-blown vessel that exhibits a glass tipped pontil scar and wide flutes. The engraving is along the vessel’s border and consists of crosshatched ovals. Such decoration was prevalent from 1760 through 1820 (Palmer 1993: 92–93).

The remaining 155 temporally non-diagnostic glass sherds are from a wide variety of objects, including wine bottles, condiment bottles, tumblers, and decanters.

Most of the 133 Personal items recovered from Feature 29 [2010] consist of fragments of white ball clay smoking pipes (90%). Other Personal artifacts consist of a copper alloy buckle and thirteen buttons. More than half of the buttons are made of a copper alloy; the remaining buttons are made of bone. Of the 119 fragments of smoking pipes, seven possessed some diagnostic characteristics similar to those in Feature 28 [2010]. Among these are Dutch pipes that feature the coat of arms of the city of Gouda. The heel of one has “666” molded on it. This variety of tobacco pipe was available from 1745 to 1812 (van der Meulen 2003). Two others have “50” crowned on the heel, dating to 1739–1819, and the final bowl exhibits a crowned “6,” dating to 1739–1850 (van der Meulen 2003). Three of the ubiquitous “Masonic” pipes that display the “Angle and Level” symbol and a deer or stag head facing the smoker are also present.
Overall, Feature 29 [2010] was determined to consist of a portion of a potentially larger feature. Size notwithstanding, this small midden revealed a single stratum that contained 1,210 artifacts. Similar to the analytical results from Feature 28 [2010], these artifacts indicate a deposition of circa 1803, during the construction period of City Hall.

Other features associated with the construction period were recovered from the northeastern area behind City Hall. Excavation in this section uncovered over 20 archaeological features dating from the eighteenth to the nineteenth centuries and capped with twentieth-century construction. Essentially, this area contained features from over 250 years of occupation within City Hall Park, demonstrating the theme of urban density and reuse that is seen throughout the property.

The northwestern section behind City Hall covers an approximately 1,900 square foot area (Map 6.09) and has been built upon multiple times, creating an amalgam of building and activity. The overall northeast profile, along with the individual feature profiles throughout, gives a sense of the multiple impacts and intrusions that occurred in the area over time (Map 6.10). Paying close attention to the information contained within construction materials, soil intrusions and impacts, and depositional composition has enhanced analysis, as sometimes the answers lie within the anomalies.
Map 6.09: CHARM layer detail of the northeast area behind City Hall.
Map 6.10: Stratigraphic profile of the northeast area behind City Hall, profile.
Feature 3 [2010], a stratified deposit surrounding a mid-nineteenth century cistern, was found via excavation to have originally been contained within an eighteenth-century cistern. The initial discovery of the deposit occurred within a test unit, though its nature would not be fully understood until the entire area was physically deconstructed and then stratigraphically reconstructed post-excavation. A discussion of these deposits requires some discussion of the process.

Test Unit 3 was one of the early units undertaken before the start of large-scale excavation in the northeast area behind City Hall. Five strata were documented within Test Unit 3 [2010]; the first two strata were associated with the modern surface and pavement. Stratum III, exposed at 1.6’ bd, consisted of dark soil and had a high density of artifacts. The test unit was excavated to a final depth of 4.25’ before being back-filled during a temporary work stoppage to facilitate a change in the project’s overall plans. Stratum III continued beyond the final excavation depth.

When excavation resumed, Test Unit 3 was renamed Test Unit 8 to distinguish it between excavation episodes and account for the inclusion of the wider area. This excavation episode would expose the eastern wall of Feature 3 [2010], a mid-nineteenth century construction discussed later. The newly renamed Test Unit 8 was excavated to a final depth of 5.1’ bd.

A total of 227 artifacts were recovered from Stratum III of Test Units 3 and 8 (Table 6.06). Almost 40% of these are within the Household functional group. Architectural and Food Related artifacts each account for 26.8% of the assemblage.
Table 6.06: Artifact summary, Test Units 3 and 8, Stratum III.

<table>
<thead>
<tr>
<th>FUNCTIONAL GROUP</th>
<th>ARTIFACT COUNT</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>1</td>
<td>.44%</td>
</tr>
<tr>
<td>Architectural</td>
<td>61</td>
<td>26.8%</td>
</tr>
<tr>
<td>Food Related</td>
<td>61</td>
<td>26.8%</td>
</tr>
<tr>
<td>Fuel</td>
<td>4</td>
<td>1.76%</td>
</tr>
<tr>
<td>Hardware</td>
<td>3</td>
<td>1.32%</td>
</tr>
<tr>
<td>Household</td>
<td>90</td>
<td>39.6%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>1</td>
<td>.44%</td>
</tr>
<tr>
<td>Personal</td>
<td>6</td>
<td>2.6%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>227</strong></td>
<td></td>
</tr>
</tbody>
</table>

The Food Related faunal remains were too fragmented to identify to the species level. The Household group consists of both ceramic and glass wares. Objects present within this group are bottles, container glass, and tableware. Some temporal information is available for the glass. A dip mold wine bottle base is dated 1730–1870 (Society for Historical Archaeology 2012); four white milk glass sherds date from 1743 onward (Miller et al. 2000:7). The latest dates come from a pressed glass tableware sherd with a molded floral pattern (1825 onward) and a non-lead bottle sherd embossed with the letter “S,” which dates from 1864 onward (Miller et al. 2000:8).

Ceramic remains are divided among coarse earthenwares, porcelain, refined earthenwares, and stoneware. All but one of the five coarse earthenwares is lead-glazed redware, for which no date can be ascribed. The fifth is a British buff-bodied sherd that is slipped and combed (1670–1795) (Azizi et al. 1996). Eight porcelain sherds, including Chinese export porcelain and hard paste porcelain, were recovered; two are identified as teaware and one as a bowl. Eight of the ten stoneware sherds are salt glazed. The stoneware artifacts include a mug incised and filled with a checkerboard pattern that was likely produced by Crolius/Remmey (1720–1820) (Janowitz 2008).
The one slip-glazed stoneware artifact is probably part of an ale or ginger beer bottle. The remaining stoneware is a white salt-glazed sherd (1720–1805) (Miller et al. 2000:10).

The majority of the ceramic artifacts are refined earthenwares including creamware, pearlware, and some whiteware, which suggests a nineteenth-century date for the deposition of this stratum.

None of the creamware sherds has any defining decorative characteristics. The majority of the pearlwares are painted, generally dating from 1775–1840 (Miller et al. 2000:12). Decorative patterns/motifs can aid in more finely dating some of the sherds. One printed pearlware sherd is dated 1803–1830 (Miller et al. 2000:13). Two sherds are identified as shell-edged pearlware/whiteware, representing a technology transition period in ceramic production, and can be dated to 1805–1895 (Miller et al. 2000:13). The five whiteware artifacts confirm the nineteenth-century date for this stratum. Whiteware was produced from 1815 onwards.\(^7\) One sherd with an indeterminate printed decoration is more closely dated to 1815–1915 (Azizi et al. 1996). A second sherd, printed with a landscape motif on the exterior and a dagger border on both the exterior and interior, is dated 1825–1880 (Azizi et al. 1996).

More than half of the 61 architectural artifacts are window glass. Some of the 16 nails were too corroded to determine their manufacture, but seven were square and two were of cut manufacture. The cut nails have a beginning date of 1790.

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\(^7\) As whiteware is technically still produced today, there is no end date.
The six personal artifacts recovered are all smoking pipe fragments: two bowls and four stems, one of which has molded leaves. One of the pipe bowls has a rounded maker’s mark stamp, though the design is not legible. There is some charring noted on this bowl. The second pipe bowl contains a common motif described in the Zorn catalog as “Cheap Pipe” (Zorn 1982:9). The bowl exhibits charring on its interior and is roughly molded with a highly visible seam and jagged rim. None of the pipe fragments provided temporal information.

Stratum III has an 1865 TPQ based on a single bottle sherd. The next closest TPQ date is 1825, followed by 1815. While both TPQ’s are possible, the 1825 date is more probable. It is likely that the 1865 sherd is intrusive from the construction of Feature 3 and it may be a better indicator of that feature’s construction date.

Stratum IV contained a more distinct and much larger deposit. A total of 2,369 artifacts were recovered from this stratum (Table 6.07). The overwhelming majority of these (67.7%) are Food Related faunal remains. The next largest functional group is Household, consisting of 21% of the assemblage. In general, the assemblage is heavily dominated toward kitchen-based activity as 88% of the artifacts have some relationship to food consumption or kitchen activity.
Table 6.07: Artifact count from Test Units 3 and 8, Stratum IV.

<table>
<thead>
<tr>
<th>FUNCTIONAL GROUP</th>
<th>ARTIFACT COUNT</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural</td>
<td>136</td>
<td>5.74%</td>
</tr>
<tr>
<td>Food Related</td>
<td>1604</td>
<td>67.7%</td>
</tr>
<tr>
<td>Fuel</td>
<td>7</td>
<td>.29%</td>
</tr>
<tr>
<td>Furniture</td>
<td>1</td>
<td>.04%</td>
</tr>
<tr>
<td>Hardware</td>
<td>1</td>
<td>.04%</td>
</tr>
<tr>
<td>Household</td>
<td>499</td>
<td>21%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>32</td>
<td>1.35%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>22</td>
<td>.92%</td>
</tr>
<tr>
<td>Personal</td>
<td>51</td>
<td>2.15%</td>
</tr>
<tr>
<td>Sanitary</td>
<td>16</td>
<td>.67%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2369</strong></td>
<td></td>
</tr>
</tbody>
</table>

Of the Food Related faunal remains, 374 were identifiable to the species level; the remaining 1,230 were identified to the class level.

The assemblage is dominated by mammal bone. Of the identified species, almost all are exclusively cattle (*Bos taurus*). A variety of skeletal elements are present, including skull, vertebrae, and long bones. One bone of note is a horn core with skull fragment that exhibits heavy bone growth.

Also present are fish and avian species. Of the identifiable mollusk species, 55 are oyster and the remainder are clam, all quahog.

The Household functional group accounts for 21% of the assemblage. The majority of these are ceramic (83.3%) and the remainder glass (16.6%).
Seventy of the 83 glass artifacts are bottle sherds. The other thirteen sherds are container glass, tableware, and a tumbler. The tumbler is molded pressed glass and dates 1825 onwards (Miller et al. 2000:7). This tumbler provides the TPQ.

Of the seventy bottle fragments, thirty are listed simply as bottle and their use not clearly identifiable, four are case bottles, and thirty-six are wine bottles. The four aqua colored sherds are from a mouth-blown mold that has an end date of 1870 (Society for Historical Archaeology 2012). The wine bottles are all dip molded dating to 1730–1870 (Society for Historical Archaeology 2012). One has an up-tooled string rim which refines the date to 1730–1850 (Jones 1986). The case bottles are also dip molded. Several of the other bottle fragments are mouth-blown molded; no temporally diagnostic data is associated with these.

Among the ceramics are 59 coarse earthenwares, predominantly redware and British buff-bodied slipware. The sixteen British buff-bodied slipware sherds exhibit a range of decorative techniques, including combed, combed and feathered, combed slip, and dot and trailed. These identified forms include dish and mug/cup/drinking pot. There are eight slip-decorated redware dish sherds and three sherds of Iberian coarse earthenware jars.

All but two of the twenty-four porcelain sherds are Chinese export with a painted decoration. There are nine teacup sherds and one teaware sherd. One of the teacups has an overglazed painted floral pattern with gilding; another has a painted Chinoiserie pattern with a fish scale motif on the border. The remaining teawares are overglaze painted with a European Neo-Classical motif dating 1765–1810 (Madsen and White 2011:116).
The 97 stoneware sherds are almost all salt-glazed gray/buff bodied. There are five white salt-glazed pieces dating to 1720–1805 (Miller et al. 2000:10). One of the five pieces has a molded beaded rim dating to 1740–1783 (Azizi et al. 1996). Two stoneware sherds belong to teapots: a Black Basalt teapot dating to 1750–1850 and an engine-turned red-bodied teapot dating to 1760–1830 (Hawkins 1999; Miller et al. 2000:10; Rikards and Carpentier 2004).

Refined earthenwares make up the bulk of the Household ceramic assemblage (n=236). Creamware accounts for 64% of this group. Almost all the creamware is plain except for six overglaze painted sherds (1765–1815) (Miller et al. 2000:12). Various vessel types are represented, including plates, bowls, teacups, and possibly a punch bowl.

Sixty-eight pearlware sherds form the remaining bulk of the refined earthenware assemblage. Forms include bowls, plates, mugs, teacups, and saucers. The majority of the sherds exhibit painted decoration and date 1775–1840 (Azizi et al. 1996; Miller et al. 2000:12). Some of the identifiable patterns and motifs include: thirteen China glaze painted sherds with a Chinoiserie motif (1775–1810) on mugs and saucers (Miller et al. 2000:12); six shell edge decorated plate sherds (1800–1835) (Miller et al. 2000:12); and eight teacup sherds painted with floral, trellis or swag designs (1775–1830) (Miller et al. 2000:12). Four printed pearlware sherds are also part of the assemblage, all with a Chinoiserie motif (1803–1830) (Miller et al. 2000:13; Jefferson Patterson Park 2017). One of these sherds is line-engraved printed. This decorative technique has a 1783–1815 date range (Miller et al. 2000:13).
The remaining seventeen refined earthenwares include: one Agate ware (1740–1783); four Jackfield type teawares (1740–1850); one Brown Faience (no date), possibly a flacon; one red-bodied slip-decorated teapot lid (no date); two tin- and lead-glazed tableware sherds (1620–1675); and four whiteware sherds with printed decoration (1815–1915) (Azizi et al. 1996; Miller et al. 2000). Two sherds of note are from a tin-glazed teacup (1680–1800) in a robin’s egg blue color (Azizi et al. 1996).

The most common Architectural artifact is iron nails (n=82). Only fifteen of these are identifiable as square manufacture. The second most prominent artifact within the Architectural group is window glass (n=37). None of these sherds has any defining characteristics.

Twenty-two artifacts were recovered as part of the Manufacturing functional group. There are eleven artifacts associated with stoneware manufacture, likely the nearby Crolius/Remmey pottery, which also had a location—possibly a store—along Chambers Street in the eighteenth century. These artifacts include sherds of kiln wasters, otherwise known as seconds or kiln pads. One of the objects is an underfired small-mouthed jar with a lightly glazed exterior and unglazed interior. Though these items were discarded or not suited for sale, it is possible they were sold damaged or as is.

Eight fragments of bone button blanks were recovered. Button making was a common activity often associated with the Almshouse. However, button making was not exclusive to the Almshouse. Soldiers have been documented making bone buttons during the Revolutionary and Civil Wars. Bone button making could be a relatively common activity.
Also among the assemblage that may relate to the activities of persons on site are two fragments of redware sugar molds. One object of interest in this group is a graphite crucible. The large vessel is covered on both surfaces with copper alloy. Another object of interest is a cast-iron andiron. Andirons were used to lay logs upon for burning in an open fireplace. In the sixteenth through eighteenth centuries they were also used as a rest for a roasting spit. They are generally used in pairs.

The Personal group consists of 51 artifacts and all but one are smoking pipe fragments. Of the smoking pipe fragments, five are pipe bowls and forty-five are pipe stems. Only one of the pipe stems has any defining characteristics: stamped lettering that appears to read “HST” over “INZ.” No information to better identify this item was found. Three of the pipe bowls have distinctive characteristics. The first is a Dutch pipe with a maker’s mark on the heel. This mark is a crown with “23” beneath it and the “Arms of Gouda” on the other side of the heel. This pipe bowl dates 1739–1819 (Boon 2012). The second distinctive pipe bowl is also a Gouda pipe with the “Arms of Gouda” on the left side of the heel; the heel also has a mark of a crowned “D.” This bowl, which dates 1739–1898 (Boon 2012), is burned from fire and not from use. The final pipe bowl with defining characteristics has a Masonic-stag motif. The bowl depicts a cervid head with upright antlers facing the smoker. A variety of Masonic symbols are present on either side: the square and compass, and possibly a shield, on the left side and the square with castles in triangle. The remaining Personal object is a copper alloy button with a loop shank.
Sixteen Sanitary related artifacts were recovered, all chamber pot sherds. Three of the five are salt glazed stoneware sherds (1720–1820) that mend and form part of a well potted, decorated, and fired piece (Janowitz 2008). The decoration is incised and filled with leaves or petals. One sherd is of slip cast creamware (1762–1820) (Miller et al. 2000:12). The remaining ten chamber pot sherds are redware.

Highlighting the incomplete and choppy nature inherent in construction based archaeology, it was not until later, as the 2010 project progressed, that it was determined that excavation would need to occur within the areaway on the southern side of the City Hall retaining wall. The impact would encompass the area of Stratum IV deposit found within Test Units 3 and 8. Whereas Test Units 3 and 8 were located on the north side of the retaining wall, Test Unit 3/8 Ext was located on the south side of the retaining wall. The modern areaway construction had impacted a portion of Stratum IV, which was exposed on the south side of the retaining wall almost immediately beneath the concrete areaway surface at approximately 3’ bd.

A total of 305 artifacts were recovered in the Test Unit 3/8 Ext. Overwhelmingly, the majority of these artifacts (94%) are Food Related faunal remains. The percentage and composition of the faunal remains and household artifacts recovered in this test unit are consistent with, and thus part of, the Stratum IV deposit. Stratum V was a clean sand layer beneath the Stratum IV deposit and was devoid of cultural materials.
The materials recovered from Test Units 3 and 8 and Test Unit 3/8 EXT are from the same deposit. The Stratum III deposition is a single deposit that may be considered secondary. Stratum III was observed on the east side of Feature 3 [2010] (exterior), which cut into this deposit (Map 6.11). It is clear the deposit was impacted, though it is less clear is if it was redeposited. The TPQ for Stratum III is 1864. However, the next TPQ, which is more consistent with the overall deposit, is 1825—a gap of almost 40 years. The 1865 date may be intrusive and more indicative of the construction date of Feature 3 than the deposition of Stratum III. The assemblage is characterized by a fairly even distribution of Architectural, Food Related, and Household remains.

Stratum IV is a primary deposit overwhelmingly characterized by Food Related faunal remains. Comparative to Stratum III, the faunal elements are larger and include a higher percentage identifiable to the species level. The TPQ for Stratum IV is 1825 from a sherd of molded pressed glass. Based upon the amount of faunal remains, it would appear that Stratum IV represents a kitchen deposit. Spatially, this area is located adjacent to the original, early-nineteenth century basement kitchen of City Hall.

There were no definitive distinctions noted during excavation that could determine if Stratum IV was a single dumping episode or an accretionary deposit. However, further excavation would determine these test units to be part of a larger, temporally stratified deposition contained within the obsolete eighteenth-century cistern.

Feature 32 [2010] was a small deposit containing 166 artifacts, the majority of which are Household related. The deposit had a roughly circular shape that was truncated by a builder’s
trench for Feature 3 [2010]. It appears as though the majority of the deposit was removed during the mid-nineteenth century construction of Feature 3. The portion of the deposit recovered has a TPQ of 1803.

Map 6.11: Profile showing the relation between Feature 3 [2010] and the Test Unit 3 and Test Unit 8 artifact deposit (represented in the graphic as Stratum II).
Feature 33 [2010] was another deposit identified following the deconstruction of a portion of Feature 3 [2010]. It was situated beneath the southeast corner of that feature and was adjacent to and abutting Feature 1 [2010], which was intrusive to the deposit (Map 6.12).

Excavation of Feature 33 recovered 318 artifacts (Table 6.08). The assemblage is dominated by Food Related remains, which account for 60%, and Household remains, which account for 23.8%. In this aspect, Feature 33 [2010] is similar to the deposit in Test Units 3, 8, and 3/8 Ext, which were situated above it.

Table 6.08: Feature 33 [2010] artifact assemblage by functional group.

<table>
<thead>
<tr>
<th>FUNCTIONAL GROUP</th>
<th>ARTIFACT COUNT</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural</td>
<td>20</td>
<td>6.28%</td>
</tr>
<tr>
<td>Arms</td>
<td>1</td>
<td>.31%</td>
</tr>
<tr>
<td>Food Related</td>
<td>191</td>
<td>60%</td>
</tr>
<tr>
<td>Household</td>
<td>76</td>
<td>23.9%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>15</td>
<td>4.7%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>4</td>
<td>1.25%</td>
</tr>
<tr>
<td>Personal</td>
<td>11</td>
<td>3.45%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>318</strong></td>
<td></td>
</tr>
</tbody>
</table>
The majority of the Food Related faunal remains were too fragmented to identify beyond the class level, resulting in 105 unidentified mammal fragments. Of the 29 bones that were identifiable to the species level, all but three are cattle. Among the six clam shells, two exhibit shucking marks.

The Household group contains seventy-six artifacts and all but four are ceramic sherds. Among the glass are two bottle glass sherds of indeterminate manufacture and two mold-blown beer or soda bottle fragments. This bottle was made in a cup mold with a snap case and dates to 1850–1920 (Society for Historical Archaeology 2012).

Fourteen coarse earthenware sherds were recovered, including three sherds of British buff-bodied slipware (1670–1795) and five sherds of lead-glazed redware (no date). The remaining six coarse earthenwares are slip decorated redware dish sherds with end dates of 1870 (Denker and Denker 1985:54-68). The three porcelain sherds, all teaware sherds with a painted decoration, are Chinese export porcelain. Four stonewares -- three gray/buff-bodied salt-glazed and one white salt-glazed teaware -- were also recovered.

Among the refined earthenwares are 34 creamware sherds (1760–1820) with no visible decoration. There are ten pearlware sherds exhibiting various decorative techniques, including one China glaze saucer painted with a floral landscape dating to 1775–1810 and a second saucer with a painted decoration dating to 1795–1830 (Miller et al. 2000:12). The remaining refined earthenwares are three tin-glazed sherds, one slip-decorated red-bodied ware sherd, and two sherds identified as “molded fruit/vegetable ware” with a green-glazed cauliflower leaf design dating to 1760–1780 (Jefferson Patterson Park and Museum 2012).
Other artifacts include four stoneware wasters or seconds, one in the form of a jug. These are likely discards from local pottery production. There are eleven Personal objects including copper alloy buttons and an English flint gunflint (Image 6.24).

![Image 6.24: Gunflint.](image6.24.png)

Feature 33 [2010] is largely comprised of Food Related faunal remains and Household materials suggestive of a kitchen-related deposit. One sherd of beer/soda bottle glass and a piece of ceramic sewer/water pipe were recovered with a beginning date of 1850. However, these are outside the range of all the other dateable materials in the Feature 33 assemblage. It is likely that these two artifacts are intrusive from the construction of Feature 3. The two next closest TPQ dates are 1795 from a painted pearlware saucer and 1775 from several artifacts. Feature 33 culminated with a thin clean sand layer devoid of any cultural material.
Another deposit in this area was Feature 35 [2010], which was spatially defined by several factors, including its appearance at the boundary, or edge, of Feature 33 [2010]; the presence of a clean sand layer beneath Feature 33 [2010]; and the intrusion of Feature 34 [2010] (Map 6.12). Feature 35 abutted the Feature 1 [2010] retaining wall and was located beneath Feature 33 [2010]. The separation of the Feature 35 and 33 was clearly visible in profile as a sand lens was sandwiched between the two deposits. In addition to the dividing sandy lens, the deposit labeled Feature 35 also appeared to contain older artifact material.

The Feature 35 [2010] deposit was fully excavated and terminated at the base of an eighteenth-century cistern at 7.2’ bd. Feature 1 [2010] and the mid-nineteenth construction of Feature 3 [2010] had truncated the cistern. The cistern was labeled Feature 33/35 [2010] and it was now obvious that Features 33 [2010] and 35 [2010], and likely Test Unit 3/8, were originally located within the interior of the cistern.8

Feature 35 [2010] is a midden assemblage containing 1,274 artifacts (Table 6.09). The assemblage shares some characteristics with the above deposits: Food Related faunal remains account for the majority of the assemblage at 58.7%, followed by Household remains at 26.7%.

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8 The Test Unit 3/8 designation represents the interface of Test Units 3 and 8.

<table>
<thead>
<tr>
<th>FUNCTIONAL GROUP</th>
<th>ARTIFACT COUNT</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>1</td>
<td>.078%</td>
</tr>
<tr>
<td>Architectural</td>
<td>49</td>
<td>3.8%</td>
</tr>
<tr>
<td>Arms</td>
<td>3</td>
<td>.23%</td>
</tr>
<tr>
<td>Food Related</td>
<td>748</td>
<td>58.7%</td>
</tr>
<tr>
<td>Fuel</td>
<td>2</td>
<td>.15%</td>
</tr>
<tr>
<td>Hardware</td>
<td>4</td>
<td>.31%</td>
</tr>
<tr>
<td>Household</td>
<td>341</td>
<td>26.7%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>43</td>
<td>3.37%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>14</td>
<td>1.1%</td>
</tr>
<tr>
<td>Other</td>
<td>45</td>
<td>3.5%</td>
</tr>
<tr>
<td>Personal</td>
<td>23</td>
<td>1.8%</td>
</tr>
<tr>
<td>Sanitary</td>
<td>1</td>
<td>.078%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1274</strong></td>
<td></td>
</tr>
</tbody>
</table>

There are 748 faunal fragments. Of these, almost 70% were only identifiable to the class level. Of the class level identifications, over 95% are mammal. There is little presence of fish or bird species.

The identifiable species are predominately cattle (89.7%). Several skeletal elements are present, including head and mandible; many of the elements exhibit marks of butchering. Caprine and pig are nominally represented. The caprine bones are almost exclusively head and mandible. Shell, which was abundant during excavation, was noted and discarded except for a few samples—these are Quahog clam and two species of oyster.

Cattle and sheep heads and cow’s feet were common in several eighteenth-century recipes, including broths made with root vegetables (Rumble 2009). A recipe from The Art of Cookery by Hannah Glasse (1774) for baked calf or sheep’s head offers insight:
Take the head, pick it and wash it very clean; take an earthen dish large enough to lay the head on, rub a little piece of butter all over the dish, then lay some long iron skewers across the top of the dish, and lay the head on them skewer up the mean in the middle that it don’t lie on the dish. Then grate some nutmeg all over it, a few sweet herbs shred small, some crumbs of bread, a little lemon-peel cut fine, and then flour it all over: stick pieces of butter in the eyes and all over the head, and flour it again. Let it be well baked, and of a fine brown; you may throw a little pepper and salt over it, and put into the dish... A bundle of sweet-herbs, and onion, some whole pepper, a blade of mace, two cloves, a pint of water, and boil the brains with some sage. When the head is enough, lay it on a dish, and set it to the fire to keep warm, then stir all together in the dish, and boil it in a saucepan; strain it off, put it into the saucepan again, add a piece of butter rolled in flour, and the sage in the brains chopped fine, a spoonful of catchup and two spoonful of red wine; boil them together, take the brains, beat them well, and mist them with the sauce: pour it into the dish and send it to the table. You must bake the tongue with the head, and don’t cut it out. It will lie the handsomer in the dish [Glasse 1774:28].

The 341 household artifacts are predominantly ceramic. The 23 glass sherds consist of bottle glass and some drinking vessel glass, including sherds of a tumbler and stemware. None provided any clear temporal data. The ceramic sherds are divided among coarse earthenwares (9.7%), porcelain (5%), refined earthenwares (70%), and stoneware (14.4%).

The coarse earthenwares consist of eight British buff-bodied slipwares and twenty-three redwares, three of which are slip-decorated. One of the redware sherds is part of a Lower Delaware Valley style bowl dating 1740–1820 (Azizi et al. 1996). The British slipwares, one of which is decorated with a dot pattern, date 1670–1795 (Azizi et al. 1996).
Several of the sixteen Chinese export porcelain sherds exhibit a painted decoration, but none have enough of the design extant to provide temporal information. Among the 46 stoneware sherds are 39 gray/buff-bodied and salt-glazed and seven white salt-glazed. The gray/buff-bodied sherds exhibit painted, cordoned, and incised and filled decoration. Identifiable forms include jars and jugs. One jar is wide-mouthed with a flat-topped squared-off rim and has a crudely executed incised and filled floral moosehead pattern. Among the white salt-glazed stoneware is a teacup with an indeterminate decoration (1720–1790) and a plate with a bead and reel molded pattern (1740–1783) (Azizi et al. 1996; Miller et al. 2000:10). Another sherd is overglaze painted which dates 1746–1783 (Miller et al. 2000:10).

The refined earthenwares are mostly creamware (67%) and pearlware (28%). The remaining refined earthenwares include three Jackfield type (1740–1850); five sherds of a tin-glazed teacup; and three engine-turned red-bodied sherds, one from a teapot lid (1760–1830) (Azizi et al. 1996; Hawkins 1999; Miller et al. 2000; Rickard and Carpentier 2004).

The majority of the creamware sherds exhibit no decoration and date 1762–1820 (Miller et al. 2000:12). There are eight plate sherds with the molded Royal Rim patter and two with the molded Queen’s Rim pattern. One sherd with a green glaze dates 1759–1775. Four mendable sherds exhibit a “DD & Co Castleford” maker’s mark with a stylized sunburst, which refines the date range to 1790–1820 (Edwards 1982; Miller et al. 2000:12). Forms include plate, mug, pitcher, saucer, and general tableware. Two sherds of a nappie, a serving dish, are also present.
A variety of decorative types are present among the pearlware sherds, including several painted sherds (1775–1830); China glaze painted (1775–1810); dipt (1775–1850); printed (1803–1830); and shell edge (1800–1835) (Miller et al. 2000). Most of the pearlware sherds are fragmented and have indeterminate forms. A painted China glaze saucer with a Chinese landscape pattern has what is described as a “kill hole” in the center of its base, appearing to be intentionally damaged or perforated.

There are fourteen Manufacturing related objects in the assemblage. Seven of these artifacts are related to stoneware pottery production (1720–1820) (Janowitz 2008). The remaining half of the assemblage contains two bone button blank fragments and five redware sugar mold sherds, two with a thin white slip on the interior (Image 6.25).

Sugar molds are generally long form with a series of depressions or earthenware cones into which raw sugar cane syrup could be poured. Each mold would stand in its own collecting pot to catch the dark syrup and un-crystallized matter that drained through a small hole in the bottom of the mold. The loaves were then tapped out of the molds, dried in a stove room, trimmed to their final shape, and wrapped. Sugar molds, and in turn the sugarloaves, varied in size considerably—the larger the loaf, the lower the grade of sugar. Households bought their sugar in the tall, conical loaves, from which pieces were broken off with special iron sugar-cutters (sugar nips). This was the standard of sugar production until the mid-nineteenth century (Society for Promoting Christian Knowledge 1846; David 1977).
Twenty-three Personal artifacts were recovered, all smoking pipe fragments. Only one has any identifying characteristics: a pipe bowl fragment molded with “R. Tippet” in a slightly oval cartouche.

Other artifacts include a glass inkwell dating 1800–1870 (Society for Historical Archaeology 2012), and three fragments of the copper (alloy) spout of a powder horn.
The Other group is composed of 45 non-food related faunal elements, including 17 canine, 23 feline, and 5 rat bones. The dog and cat bones include various skeletal elements, suggesting that the deceased animals were discarded within this feature.

Feature 35 [2010] was discovered in an area that was exceedingly complex stratigraphically, having been built upon multiple times. The eighteenth-century cistern, which contained the Feature 33 [2010] and Feature 35 [2010] deposits, was the first feature constructed in this vertical location (Image 6.26). At some point, this cistern was no longer used for the purpose of holding water and it became a repository for trash, as represented in the Feature 35 deposit. Map 6.13 provides a stratigraphic profile of the area along with TPQ dates.

Characterized by a large number of Food Related faunal remains and Household items, this assemblage is also suggestive of a kitchen deposit. The TPQ for Feature 35 [2010] is 1800. The deposition was covered with a layer of clean sand. Sometime after that, an additional smaller deposit accumulated. The most recent deposit, Feature 33 [2010], was also impacted during the construction of Feature 1 [2010] and Feature 3 [2010]. The Feature 33 [2010] deposit did not encompass the full width of the cistern. Instead, it was surrounded by clean soils that extended to the boundary of the cistern’s walls. This was likely fill associated with the deconstruction of the cistern walls. Feature 33 [2010] is similar in composition to Feature 35 [2010] (Figure 6.02) and has a TPQ of 1795.
The Feature 33 [2010] deposition was also covered with a layer of clean sand prior to the third deposition episode within the cistern. This third deposition includes Stratum IV of Test Units 3 and 8 [2010] and Stratum VII of the Feature 3 [2010] excavation. The TPQ for Stratum IV is 1803.

A fourth and final deposition within the cistern occurred sometime before the construction of Feature 3. This was excavated as Stratum III in Test Units 3 and 8. Feature 3 [2010], constructed post 1850, impacted this deposit and can be considered of mixed context. The TPQ is 1825.

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9 This stratum is discussed with Feature 3 [2010] for continuity.
With the exception of the fourth episode, the three deposition episodes contained within the cistern are fairly similar in composition. The deposition TPQ’s range from 1795–1825 and Table 6.10 provides the TPQ for each of the episodes. A thin layer of clean sand separated each of the deposition episodes. Though it is unclear when the walls of the cistern were deconstructed and some of the deposition episodes were disturbed, resulting in an incomplete sample, it is clear that the cistern was used as a receptacle for trash deposition for a period of time.

It is likely that these deposits are from the presence of workers during the construction of City Hall. The workers were on site for eight years and there are undocumented references to workers living on site. Regardless of whether they were living on site or not, they would have probably partaken in at least one meal per day at the construction site. As people have a tendency to transport
their “trash” in as short a distance as possible before discarding it, this empty shaft feature would have made an ideal receptacle for the workers.

Table 6.10: TPQ for each of the deposition episodes within Feature 33/35.

<table>
<thead>
<tr>
<th>Deposition episode</th>
<th>TPQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV</td>
<td>1825</td>
</tr>
<tr>
<td>III</td>
<td>1803</td>
</tr>
<tr>
<td>II</td>
<td>1795</td>
</tr>
<tr>
<td>I</td>
<td>1800</td>
</tr>
</tbody>
</table>

Comparatively, the fill deposit within the intrusive Feature 3 [2010] is quite different with regard to composition and date. Architectural materials and a larger percentage of Household materials dominate the interior of the Feature 3 [2010] assemblage (Figure 6.03). Food Related faunal remains no longer dominate the assemblage as they rank third with regard to percentage of the whole. Additionally, the TPQ for this deposit is much later: 1875.

Figure 6.03: Composition of Feature 3 [2010] interior deposit.
The interior deposit of Feature 3 [2010] is the result of activity from a century later than the cistern deposition. In this instance, it may also be related to work on site, though during a period after City Hall had been operating for several decades. The late-nineteenth century date for this deposition further reinforces notions of behavioral patterns with regard to trash disposal in New York City. As previously stated, people tend to dispose of their trash in the closest, most convenient location. Once again, an unused subterranean feature was an ideal receptacle for disposal.

The materials excavated immediately beneath the floor of Feature 3 are slightly problematic with regard to their association. They could be part of the larger interior cistern deposit discussed above or they can be more recent and related to the construction of Feature 3 [2010].

**OTHER CITY HALL ERA STRUCTURES**

No longer extant exterior structures associated with City Hall were documented in this area. The first was the above-mentioned Feature 3 [2010]. This was a pressed brick structure located alongside, and up against, the City Hall retaining wall (Feature 1 [2010]) (Images 6.27 and 6.28).

Image 6.28: Feature 3 [2010], fully excavated facing south.
Feature 3 measured 6’ x 9’ with 1’ thick walls and was composed of pressed brick with a natural cement mortar (JBC 2010) (Map 6.14). Natural cement was first discovered in America in 1817 in Fayetteville, New York, during the construction of the Erie Canal. Natural cement refers to any naturally occurring mixture of limestone and clay, though it was used in commercial production as early as 1819 (JBC 2010). The pressed brick used in the construction dates the feature to circa 1860 (JBC 2010). No information was discovered during excavation that would aid in definitively identifying the original function of this feature, though there are hypotheses can be postulated. The feature had a brick floor that was exposed at 4.5’ bd with a deliberately unlaid 1.4’ x 1.1’ area that likely served as a drain.
Feature 3 was constructed during the mid-nineteenth century. It is composed of pressed brick bonded with natural cement.

A builder’s trench was observed along a small portion of the north wall of Feature 3 [2010] and along a portion of the east wall. It was visibly intrusive to the deposit labeled Feature 32 [2010]. Nineteen artifacts were recovered from this intrusion, but none have any temporally defining characteristics. The creamware sherd is assigned the standard date range of 1762–1820 and the painted pearlware sherd is dated 1775–1830. The remaining seven ceramic sherds are part of a slipped redware dish with an end date of 1870.

The structure was built atop a sandy underlayer. The unmortared and laid brick floor was constructed with a deliberately unpaved area (Image 6.26). Both aspects suggest facilitating some form of drainage. Additionally, the east and west walls of the structure had deliberate openings that correlated to the drains exposed in the northeast area (Image 6.29).

Feature 3 [2010] potentially served as an icehouse based on the aspect of drainage and its proximity to the City Hall kitchen. The early configuration of City Hall’s basement included an exterior door that led from the basement kitchen area to the northeast area, situated between the locations of Features 3 [2010] and 4 [2010].
Icehouses are typically above ground structures with shallow subterranean levels. Regionally, icehouses tend to have a circular form with a domed roof. A squared structure is more common to cold storage. However, Feature 3 did not appear to share other characteristics of cold storage, such as a ventilated floor (URS 2011).

At some point in its functional lifecycle, it served as a drainage point for the drainage system surrounding City Hall and for refuse disposal. The drainage system is discussed later in this chapter.

The interior of Feature 3 contained an ashy fill deposit with cultural materials. The deposit consisted of two strata and extended to the floor of the feature. The deposit represents a later period and is not part of the original function of the feature. During excavation, it was noted that the area within the open portion of the floor contained a separate sandy deposit. Removal of a section of the brick floor revealed a distinct stratum, also containing cultural materials, beneath the floor of Feature 3. This deposit, the above mentioned Stratum VII, pre-dates the interior fill from Feature 3.

The interior fill material has a TPQ of 1875, a mere 15 years after the construction date of circa 1860. The composition of the deposit, containing a significant amount of interior architectural material, window glass, and nails, suggests that this deposit is contemporaneous with one of the renovation episodes that occurred within City Hall: the 1902 Aiken renovation.
Image 6.29: Wall openings to facilitate drainage were present in the east and west walls of Feature 3 [2010].

The interior fill of Feature 3 [2010] was a contained stratified deposit associated with the late-nineteenth century period of City Hall’s occupation. Strata I and II were clearly disturbed. They are part of the compacted layer that contained bedding materials, including recycled concrete aggregate (RCA), for the bluestone pavers that surround City Hall.
Both Stratum I and II lack any primary context and are of limited interpretive value. The RCA provides a modern twentieth-century TPQ for these strata. The strata were both located above the walls of Feature 3, serving as the underlayer for the modern bluestone surface. Any artifacts appear to have been redeposited along with the soils associated with the regrading of the area surrounding City Hall in the twentieth century and represent a secondary or tertiary deposition.

Stratum III was a sizable artifact deposit containing 1591 artifacts (Table 6.11). Almost half of these are Architectural materials, accounting for 44%, followed by Household related artifacts, which account for 29.1% of the assemblage. The materials from Stratum III were embedded in a sandy fill mixed with mortar and ash inclusions.

Table 6.11: Feature 3 [2010], Stratum III artifact count by Functional Group

<table>
<thead>
<tr>
<th>FUNCTIONAL GROUP</th>
<th>ARTIFACT COUNT</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>6</td>
<td>.37%</td>
</tr>
<tr>
<td>Architectural</td>
<td>698</td>
<td>43.8%</td>
</tr>
<tr>
<td>Food Related</td>
<td>199</td>
<td>12.5%</td>
</tr>
<tr>
<td>Fuel</td>
<td>15</td>
<td>.94%</td>
</tr>
<tr>
<td>Furniture</td>
<td>9</td>
<td>.56%</td>
</tr>
<tr>
<td>Hardware</td>
<td>11</td>
<td>.69%</td>
</tr>
<tr>
<td>Household</td>
<td>464</td>
<td>29.1%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>114</td>
<td>7.1%</td>
</tr>
<tr>
<td>Lighting</td>
<td>36</td>
<td>2.2%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>4</td>
<td>.25%</td>
</tr>
<tr>
<td>Medical</td>
<td>1</td>
<td>.06%</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>.06%</td>
</tr>
<tr>
<td>Personal</td>
<td>25</td>
<td>1.5%</td>
</tr>
<tr>
<td>Sanitary</td>
<td>7</td>
<td>.44%</td>
</tr>
<tr>
<td>Toy/Recreation</td>
<td>1</td>
<td>.06%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1591</strong></td>
<td></td>
</tr>
</tbody>
</table>
The majority of the 698 Architectural artifacts are common window glass sherds, which accounts for over 75% of the group. There are some large pieces of (possibly interior) window pane among the collection, including some which appear to fit a non-square or rectangular window. One sherd is frosted and etched, likely having belonged to an office door. Of the 158 iron nails recovered, most are too rusted to determine their manufacture. Of those that are identifiable, there are fourteen square nails, one hand-wrought nail, and one headed machine-cut nail. A single copper alloy hand-wrought nail is also among the assemblage. One wire nail is dated post 1875 (Wells 2000:326–327).

The majority of the 199 Food Related faunal remains are only identifiable to the class level. These are fairly evenly divided among medium terrestrial mammal, large terrestrial mammal, and unidentified mammal. Among the few identifiable to species level are cattle \((n=10)\), caprine \((n=7)\), pig \((n=3)\), and chicken \((n=1)\). Many of the bones are fragmented and show evidence of butchery. Twenty-nine mollusk shells were recovered, of which the majority are Quahog clam \((n=22)\). Of the seven oyster shells, one is riddled with predator holes.

Glass accounts for 66% of the 464 Household related artifacts recovered from Stratum III. Among these are 270 pieces of bottle or container glass. Various manufacture techniques are represented among the bottles, including mouth blown, mold blown, and dip molded. Of the dateable bottles, most date 1730–1870 based on the mold type. Fifteen case bottle sherds date 1730–1870. Based on the finish type, one amber bottle dates 1840–1920 (Society for Historical Archaeology 2012). Forty-four mold blown demijohn sherds are also part of the glass assemblage. These sherds have an end date of 1920 (Jones and Sullivan 1989:39). Thirty-one glass tumbler fragments were
recovered and several of these are pressed and molded with a fluted form and date 1825–1930 (Image 6.30) (Miller et al. 2000:7).

The 156 ceramic artifacts are divided among coarse earthenwares, porcelain, refined earthenwares, and stoneware. The coarse earthenwares include fifteen sherds of lead-glazed redware (no date) and six British buff-bodied slipware sherds (1670–1795) (Azizi et al. 1996). Three of the British buff-bodied sherds represent a dish with a combed slip decoration and another sherd of a dish with a trailed slip decoration.
Among the 21 porcelain sherds are hard and soft paste porcelain, Chinese export porcelain, and bone china. One hard paste porcelain sherd of an indeterminate form is painted with liquid gold over an orange colored glaze. This type of decoration was first available in 1870 (Miller et al. 2000:13). Among the identifiable forms are teawares, including an undated Chinese export porcelain saucer with an overglaze painted geometric pattern. The rim pattern is a yellow band bordered in black lines over an orange band with gilded swags. A bone china teacup is painted with a landscape design with a diaper trellis border with pendant dumbbells alternating with elongated diamonds (1794–1840) (Jefferson Patterson Park and Museum 2012).

The stonewares are mostly salt-glazed, except for four slip-glazed sherds. These are all likely from utilitarian vessels, though the majority are too fragmented to conclusively identify the object. Four sherds are from salt-glazed jar/jugs.

A total of 88 refined earthenwares sherds were recovered. Most of the 35 creamware sherds had no visible decoration. Sixteen pearlware sherds of various decorations are part of the assemblage. The general pearlware date is 1775–1840, though some decorations can be more specifically dated (Miller et al. 2000:12). A dipt decorated sherd with a herringbone motif dates 1775–1850 and a teapot sherd in the Castleford style dates 1790–1840 (Azizi et al. 1996; Rickard 2006).

Several of the 28 whiteware sherds have printed patterns dating 1815–1915 (Azizi et al. 1996). Two of the sherds have a printed floral pattern; one of these has the flowers printed on a “worm trail” background. One sherd, part of the same vessel from Stratum V, is from a child’s mug printed
with Ben Franklin’s maxims (1815–1880) (Riley 1991).10 The sherd is burned, making the print illegible. Other objects include portions of a teacup, plates, and an egg cup (Image 7.65).

The remainder of the refined earthenwares includes an Agate ware sherd (1740–1783); a red-bodied teapot lid (1763–1820); Rockingham (1812–1920); a white granite tableware sherd (1842–1930); and two yellowware sherds (1827–1940) (Azizi et al. 1996; Miller et al. 2000).

Seven percent \( (n=114) \) of the Stratum III assemblage was Unidentifiable. The majority of these artifacts are metal or composite materials. Three noted objects include what may be a piece of a red rubber ball; a piece of glass that may be part of jewelry or some other ornament; and a green glass disk with a rusted corroded material attached to one surface. As the glass is not clear, it is unlikely to be an eyeglass lens.

Three sherds of a large redware flowerpot saucer, all of which mend together, were recovered. The remaining three Activities related artifacts are a worn slate pencil fragment and two sherds of a brown/purple glass Master ink bottle (1830–1930) (Society for Historical Archaeology 2012).

There are nine artifacts related to Furniture and eight of these are sherds of mirror glass. The other artifact is an iron tufting button. The artifact is the back of the button with a remnant of cloth covering on the face. This type of button was used on upholstered furniture and carriage seats.

\[ \text{\ }^{10} \text{Benjamin Franklin’s maxims appeared in his annual Poor Richard’s Almanac from 1732–1758.} \]
Thirty-six glass sherds are from lighting devices, including lampshades, lamp chimneys, and lamp globes. Colors include clear and milk glass in white and green and white and red. The six lamp globe sherds are frosted with a geometric pattern. The lamp glass sherds provided minimal temporal data, though some could be assigned a beginning date of 1743 (Miller et al. 2000). None have a definable end date. Four manufacturing artifacts were recovered, including three salt-glazed stoneware wasters (1720–1820) and a sherd from a redware sugar mold (Janowitz 2008).

The single Medical related artifact recovered is a mold-blown and embossed panelled medicine bottle dating 1847–1920 (Griffenhagen and Bogard 1999; Jones and Sullivan 1985:39). The embossed lettering on the bottle reads “R.R.R. RADWAY & Co NEW YORK/ENTD ACCORD TO ACT OF CONGRESS” (Image 6.31). This refers to Radway’s Ready Relief introduced by Richard R. Radway circa 1847 as a pain reliever and for other ailments, including dysentery (Image 6.32). Radway’s Ready Relief was sold until 1928 (Griffenhagen and Bogard 1999:82).

The Personal functional group category consists of shoe remnants, buttons, and smoking pipe fragments. A total of nine pipe stems, all undecorated, were recovered, along with three pipe bowls. One of the bowls is molded with a fluted pattern and the other has an incised band around the rim. All three are smoked, but no dateable characteristics are present.
Among the Clothing related items recovered are three buttons. The two of them are porcelain buttons that are pressed (1840–1960) (Sprague 2002:111–127). The third button is made of a synthetic rubber (1853–1886) (Rusch-Fischer 2012). This button measures 9/16” and was attached with a white metal loop. The back of the button is marked “N.R. CO. GOODYEAR’S P-T,” a novelty rubber company that closed in 1886 (Cienna 2012).

The remaining Personal artifacts are ten leather shoe remnants, portions of the heel, and one upper boot scrap. The nine heel scraps are all part of a stacked leather heel with visible nail holes.

Image 6.32: An 1886 ad for Radway's Ready Relief promising relief from various ailments (The Budget, September 8, 1886, I(36)).
Six Sanitary artifacts were recovered; five of these are sherds from an undecorated white granite basin (1842–1930) and an Ironstone chamber pot sherd with a printed faux marble decoration (1840–1915) (Azizi et al. 1996; Miller et al. 2000:13). One sherd from an Albany type slip-decorated spittoon was also recovered. The final artifact in this assemblage is of a single stoneware marble.

Stratum V is a continuation of the same deposit excavated as Stratum III, except with a lesser density of artifacts and a greater density of coal and ash. This strat formed the bottom 0.2’ of the fill deposit within Feature 3. A total of 393 artifacts were recovered from this level (Table 6.12). Almost half are Architectural artifacts, the majority of which are common window glass sherds (88%). The remaining artifacts are iron nails of indeterminate manufacture.

<table>
<thead>
<tr>
<th>FUNCTIONAL GROUP</th>
<th>ARTIFACT COUNT</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>1</td>
<td>.25%</td>
</tr>
<tr>
<td>Architectural</td>
<td>180</td>
<td>45.2%</td>
</tr>
<tr>
<td>Food Related</td>
<td>70</td>
<td>17.58%</td>
</tr>
<tr>
<td>Fuel</td>
<td>1</td>
<td>.25%</td>
</tr>
<tr>
<td>Furniture</td>
<td>4</td>
<td>1%</td>
</tr>
<tr>
<td>Hardware</td>
<td>2</td>
<td>.5%</td>
</tr>
<tr>
<td>Household</td>
<td>91</td>
<td>22.8%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>19</td>
<td>4.77%</td>
</tr>
<tr>
<td>Lighting</td>
<td>12</td>
<td>3%</td>
</tr>
<tr>
<td>Personal</td>
<td>10</td>
<td>2.5%</td>
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<tr>
<td>Sanitary</td>
<td>7</td>
<td>1.75%</td>
</tr>
<tr>
<td>Toy/Recreation</td>
<td>1</td>
<td>.25%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>398</strong></td>
<td></td>
</tr>
</tbody>
</table>
Among the 70 Food Related faunal remains are two oyster shells, 14 large terrestrial mammal bones, 18 medium terrestrial mammal bones, 6 avian bones, 1 cattle bone, and 29 indeterminate mammal bones.

There is a range of types among the 91 Household artifacts. Among these are five tumbler drinking glass sherds representing a minimum of three vessels. Other glass artifacts include tablewares, such as stemware and container glass. Most of this glass is pressed glass with a molded pattern. The manufacture technique dates these items as 1825–1930 (Miller et al. 2000:7).

The range of ceramic wares includes a single coarse earthenware redware sherd, eleven porcelain sherds, and eight stoneware sherds. The porcelain sherds are mostly teawares, including a Chinese export porcelain with an overglaze painted European Neo-Classical design (1765–1810) and two bone china teacups printed with a Chinese landscape design (1810–1840) (Jefferson Patterson Park and Museum 2012; Madsen and White 2011:116). The three stoneware artifacts are salt-glazed with an Albany type slipped interior that mend with sherds from Stratum III.

The remaining ceramic artifacts are refined eatenwares, including creamware (1760–1820), pearlware (1775–1840), and whiteware (post 1815). Of note are four sherds from a child’s mug printed with Ben Franklin’s maxims dating between 1815 and 1880 (Image 6.33) (Riley 1991). The discernible text reads “THE WAY TO WEALTH… DR. FRANKLIN Poor Richards… FOR YOUTH”. Two additional sherds from this mug were found within Stratum III.
Other artifacts recovered include a slate pencil, four mirror glass sherds, and a light green glass marble. Twelve Lighting related artifacts were recovered, all of which are glass sherds from lamps or globes. Some of these lamp fragments are likely part of the same vessels from Stratum III. One of the lamp globe sherds is acid etched with a frosted pattern resembling chevrons.

The ten Personal artifacts consist of nine smoking pipe fragments and one synthetic rubber comb. The pipes are both stem and bowl fragments, two of which are in the Peter Dorni style (Dallal 2000:35). The comb fragment dates post 1815.

Two of the Sanitary artifacts are from an ironstone vessel printed with a faux marble pattern (1840–1915) (Azizi et al. 1996). Based on the color of the pattern, these are not from the vessel found in Stratum III. Five stoneware sherds of a spittoon (1805–1940) are also among the assemblage (Image 6.34) (Azizi et al. 1996).

The deposit excavated from within Strata III and V is a single deposit as evidenced by cross mends and sherds of the same vessel. The materials reflect two things: refuse from some sort of building renovation and a range of mid-nineteenth-century materials associated with dining and social activity. The Household items reflect vessels associated with meals and tea, or items associated with consumption and serving, with little evidence of vessels associated with food preparation. Further supporting the notion that the assemblage reflects social activity is the presence and number of drinking glasses, tumblers and stemware, smoking pipes, and spittoons.
Image 6.33: Child’s cup with illegible printing.

Image 6.34: Albany type slip decorated stoneware spittoon.
The numerous Architectural materials consist mostly of window glass sherds, including some large panes. Many seem to be from interior office doors, based on their thickness, shape, and being etched or frosted, as opposed to exterior windows. These may represent one of the interior renovations that occurred within City Hall itself.

The TPQ for the assemblage is 1875, taken from an iron wire nail. The deposition date likely corresponds to the circa 1902 William Martin Aiken renovation of City Hall that redesigned the interior. An account of the work to be undertaken was written and submitted by Aiken (August 12, 1902). In the account, Aiken listed general repairs to sashes and windows, work on transoms, the mounting of a new casement sash in the mayor’s office, the opening of at least two closed windows, installing windows in place of the two outside doors, and the removal of two French screens made of wrought iron and glass. Aiken also noted the use of cinder block as needed to level the new basement floors. The work proposed involved both glass work and the use of cinder blocks, two of the most common items present in the Feature 3 fill deposit. Additionally, this deposit contains materials likely associated with the people working at City Hall.

Two strata were excavated beneath the floor of Feature 3, Stratum IV and VI. Stratum IV was a thin layer of sandy soil immediately beneath the brick floor of Feature 3. Only 32 artifacts were recovered from this layer. The sandy soil was used as a bedding layer for the construction of Feature 3 and the artifacts within this layer likely date to that period.
Stratum VI was only present within a portion of the Feature 3 footprint -- beneath the southwestern portion of Feature 3. This layer was located immediately beneath the sand underlayment observed in Stratum IV. It is likely part of the same deposit/episode, but Stratum VI was noted as clayey compared to the sandy texture of Stratum IV. The assemblage is consistent with that of Stratum IV and contains 48 artifacts.

The Stratum VII assemblage was larger as it contained 453 artifacts (Table 6.13). Though first recognized as an artifact deposit beneath Feature 3, it was later determined that this stratum was part of the interior cistern deposit excavated within Test Units 3 and 8 and others.

Table 6.13: Feature 3 [2010], Stratum VII artifact count.

<table>
<thead>
<tr>
<th>FUNCTIONAL GROUP</th>
<th>ARTIFACT COUNT</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural</td>
<td>33</td>
<td>7.18%</td>
</tr>
<tr>
<td>Arms</td>
<td>2</td>
<td>.43%</td>
</tr>
<tr>
<td>Food Related</td>
<td>226</td>
<td>49.2%</td>
</tr>
<tr>
<td>Hardware</td>
<td>1</td>
<td>.21%</td>
</tr>
<tr>
<td>Household</td>
<td>164</td>
<td>35.7%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>2</td>
<td>.43%</td>
</tr>
<tr>
<td>Lighting</td>
<td>1</td>
<td>.21%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>10</td>
<td>2.17%</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>1.3%</td>
</tr>
<tr>
<td>Personal</td>
<td>14</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>459</strong></td>
<td></td>
</tr>
</tbody>
</table>

Food Related faunal remains account for 48% of the Stratum VII assemblage. Many of these were only identifiable to the class level.

Among the 34 cattle elements recovered, several different parts of the skeleton are present. Across the assemblage, several of the bones show evidence of sawing or chopping. The single mollusk specimen (taken as a sample) is a large, chowder sized Quahog clam.
The Household functional group accounts for 37% of the Stratum VII assemblage. Thirty-four of these are glass artifacts consisting of container or bottle glass sherds. Among these are sixteen dip molded wine bottle sherds dating 1730–1870 (Society for Historical Archaeology 2012). Three of the glass sherds are tableware, including one tumbler. None of these three have temporally diagnostic characteristics.

The 134 ceramic artifacts consist of coarse earthenwares \((n=16)\), porcelain \((n=5)\), refined earthenwares \((n=82)\), and stoneware \((n=27)\).

Among the coarse earthenwares are four British buff-bodied, slip-decorated sherds, two in the form of a dish. One of these sherds has reverse slip colors: a broad light slip trail on a dark slip background. The remaining twelve coarse earthenwares are common lead-glazed redwares that do not have assigned date ranges.

The porcelain components include four Chinese export porcelain sherds and one bone china sherd. The Chinese export porcelain is painted. One tea cup sherd is overglaze painted with a European neo-classical style motif (1765–1810) (Madsen and White 2011:116).

Refined earthenwares make up the majority (61%) of the ceramic collection. With one exception, these sherds are either creamware (1762–1820) or pearlware (1775–1840) (Miller et al. 2000:12). Most of the creamwares do not have a distinctive decoration to refine the standard date range of 1762–1820. There are two bat printed sherds that date 1765–1820 (Miller et al. 2000:12). The identifiable creamware forms are a bowl, plates, a saucer, and a teapot. Several of the pearlwares
have decorative characteristics that allow for refinement of their date range. Among these are three shell edge sherds (1800–1835); China glaze painted with a Chinoiserie motif (1775–1810); floral painted (1795–1830); dipt with a checkerboard pattern (1775–1850); and printed (1803–1830) (Miller at al 2000:12–13; Rickard 2006). Forms include plates and saucers. The remaining refined earthenware fragment is the rim sherd of an Ironstone/Stone China plate (1840–1915) (Azizi et al. 1996).

The majority of the stoneware is gray/buff-bodied, salt-glazed stoneware (1720–1820) (Janowitz 2008). Of the twenty-four salt-glazed sherds, only six had definitively identifiable forms: three jar sherds and three sherds of a porringer or small bowl that mend. The mendable vessel has a mottled brown exterior and an even glossy interior brown slip. Two sherds in the stoneware assemblage are slip-decorated Nottingham type (1683–1810) (Miller et al. 2000:10). The remaining two sherds are from a white salt-glazed saucer and teacup (1720–1790) (Miller et al. 2000:10).

The Architectural group consists of 20 sherds of common window glass and 13 iron nails. Only two of the nails could be identified as square. The remainder are too heavily corroded to determine their manufacture. Ten pottery production related artifacts were recovered, including a preformed stoneware kiln pad and a redware sherd with a kiln pad fragment. Five sherds of salt-glazed stoneware wasters or seconds are among the Manufacturing related artifacts (1720–1820) (Janowitz 2008). One of the wasters is identified as a jar and another is a pan identified as a Crolius/Remmey kiln waster. Three sherds of a redware sugar mold, one with a thin white slip on the interior, round out the Manufacturing group.
Other artifacts include one sherd of milk glass that dates post 1743, and thirteen smoking pipe fragments. Two pieces of English flint were recovered. One is a large flake fragment, likely from gunflint manufacture. The second is a wedge shaped piece of flint with heavy wear along the thin edge. This is possibly a strike-a-light. These two Arms related artifacts are among the few of this type to be recovered across the site from all excavation projects.

The TPQ for this assemblage is technically 1840, based upon the Ironstone. However, this sherd could be intrusive from the Feature 3 [2010] construction. The next closest date is 1803, which is more consistent with the majority of the assemblage and the other strata excavated from within the cistern.

The other substantial City Hall era structure to be exposed in this area was Feature 4 [2010], located to the west of Feature 3 [2010]. This structure was a medium-sized outbuilding that was located close to the juncture of City Hall’s east wing and central section. Exposed at approximately 1.5’ bd, Feature 4 [2010] consisted of a rectangular brick and stone foundation with an attached bay (Map 6.15). The main body of the foundation was 16.8’ in length along its longer east-west axis and 8.4’ along its shorter north-south axis. The attached bay was also rectangular. It was located in the center of the feature’s southern wall and measured 8.8’ along its east-west axis by 2.4’ along its north-south axis.

A large slab of schist, or granite, was located in the bay at 2.9’ bd. The slab was level and appeared to be purposefully placed. It measured 4.8’ long by 2.2’ wide by 0.2’ thick, which was not large enough to completely fill the bay’s interior space.
The southwestern portion of the main structure and the bay sat directly upon and were anchored to the northeastern arc of Feature 2 [2010] (an eighteenth century cistern) by mortar. Feature 7 [2010], a small shaft feature, was encountered beneath the northwest corner of Feature 4 [2010]. In this case, the walls of Feature 4 [2010] were not mortared directly to the shaft; rather another granite slab, that capped Feature 7 [2010], served as the anchoring point. A third feature was encountered within Feature 4’s walls: Feature 6 [2010], a small rectangular shaft/wooden box.

The foundation walls were three stretchers wide and approximately 1’ wide and approximately 2 vertical feet of the feature’s walls were extant. Various combinations of brickwork (1.2’) and stone (.8’) made up Feature 4 [2010]’s walls. In general, the brickwork is best described as American Bond, which usually consists of a series of three to five stretcher courses separated by single header course. There are portions of the foundation wall in which the header course is actually constructed of “rowlocks,” which are headers laid lengthwise (Images 6.35 and 6.36). In general, the brickwork consisted of five stretcher courses upon a single header course. On the interior of the foundation, the brickwork sat upon two courses of stonework. The first course of stone was of cut granite block (0.4’) and the second of cut schist blocks (0.4’). All the joints between brick and stone were mortared.
Map 6.15: Plan view of Feature 4 [2010].
Image 6.35: Feature 4 [2010], View of interior brickwork of western wall.
Feature 4’s exterior contrasted greatly with its interior. Instead of the neatly cut granite blocks beneath the brickwork, a rough mass of brick and stone was present (Image 6.37). It exterior consisted of a mixture of rough-cut schist and randomly oriented bricks that protruded approximately 0.3’ from the western wall. This capped a rough-cut course of schist blocks. The rough work either represents a “spread” footer, or it may have been constructed in order to marry the exterior with Feature 2 [2010]. However, the eastern exterior wall also exhibits protruding rough brickwork (Image 6.38), this probably indicates that the protrusion was designed as a “spread” footer. As can be seen in the photograph, the lower exterior bricks in the eastern wall appear rougher and have a different hue. This may indicate that they were either recycled from an
earlier structure or merely manufactured differently. The roughness of the exterior brickwork indicates that these portions were below ground and not visible. The interior face(s) were most likely visible while the outbuilding was in use.

As previously stated, the slab located within the trench was purposely placed. It would be expected that the placement of this slab would be a clear demarcation between the various strata of the trench. However, excavations revealed that, while Stratum III capped the slab, a small approximately 0.1’ thick and basin-shaped pocket of Stratum III was also located beneath the slab. It appears that a small amount of Stratum III soils was utilized to “even out” the surface of Stratum IV. This would have served to make a stable horizontal (level) surface to place the slab upon. Additional amounts of Stratum III were then placed atop the slab.
There are several possible reasons for the placement of the slab. The first is that it may have been part of an attempt to “floor” the bay and possibly the rest of Feature 4. The profile indicates that the slab is only 0.2’ above the stone footers that support portions of Feature 4 [2010]’s walls (Map 6.16). This position indicates that the slab may have been intended as flooring. The lack of similar slabs in the main body of Feature 4 [2010] may indicate that this was only intended in the bay, or simply not completed elsewhere. The second possibility is that the bay was intended to be used as an oven or fireplace. The position and shape of the bay suggests that it was once part of oven/fireplace/chimney attached to the rear of the structure. The slab may have been utilized as the base of such a fireplace. However, there is no supporting evidence for this. Based on the soil matrix—and observed amounts of cobble, mortar, and brick fragments in Strata III and IV—these
strata may represent the demolition of Feature 4 [2010]. This would then indicate that the slab’s position was entirely coincidental.

Map 6.16: Profiles of southern wall.
A total of 1,080 artifacts were recovered from the interior of Feature 4 [2010]. Ninety-six of these artifacts were recovered from the two heavily disturbed/modern strata (Strata I and II). These artifacts are not discussed. The artifact densities from the historical strata are shown in Figure 6.05.

Stratum III was likely a demolition horizon associated with the destruction of Feature 4 [2010]. The fact that nearly half (47%) of the 340 artifacts recovered from Stratum III were architectural remains lends credence to this hypothesis. Household artifacts only account for 34% of this assemblage. Table 6.14 summarizes the totals from each functional group.

Figure 6.04: Feature 4 [2010] historic artifact densities by strata.
Table 6.14: Feature 4 [2010], Stratum III, totals from functional groups.

<table>
<thead>
<tr>
<th>FUNCTIONAL GROUP</th>
<th>ARTIFACT COUNT</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>4</td>
<td>1.17%</td>
</tr>
<tr>
<td>Architectural</td>
<td>160</td>
<td>47%</td>
</tr>
<tr>
<td>Commercial</td>
<td>5</td>
<td>1.47%</td>
</tr>
<tr>
<td>Hardware</td>
<td>2</td>
<td>.58%</td>
</tr>
<tr>
<td>Household</td>
<td>115</td>
<td>33.8%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>39</td>
<td>11.4%</td>
</tr>
<tr>
<td>Lighting</td>
<td>3</td>
<td>.88%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>1</td>
<td>.29%</td>
</tr>
<tr>
<td>Personal</td>
<td>10</td>
<td>2.9%</td>
</tr>
<tr>
<td>Sanitary</td>
<td>1</td>
<td>.29%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>340</strong></td>
<td></td>
</tr>
</tbody>
</table>

The bulk of the Architectural materials (58%) are window glass fragments. Nails account for 19%. These specimens are too heavily corroded to identify shape or manufacturing technique.

The only temporally diagnostic artifacts among the architectural remains are pressed window glass. These are thick, flat specimens with narrow ridges on one surface. This type of window glass is known as “privacy glass” and was popular circa 1850 through 1950 (Old House Journal 2012). The remaining Architectural materials are likely the result of the demolition of Feature 4. The firebrick may indicate that the bay portion of Feature 4 was utilized for heating or cooking.

The Household artifacts consist of ceramic (71%) and glass (29%) artifacts. The ceramic assemblage includes refined earthenware, coarse earthenware, stoneware, and porcelain. The greater amount of utilitarian and serving wares (i.e., coarse earthenwares and stonewares) may indicate that Feature 4 [2010] was utilized for food preparation, while service occurred elsewhere.
The refined earthenwares generally indicate a late-nineteenth-century deposition. The latest specimen is a whiteware hollowware sherd that exhibits the monogram “PPCO,” which is surrounded by the words “SEMI / PORCELAIN.” This is the mark of the Peoria Pottery Company, which produced similar vessels from 1890 through 1904 (Barber 1968: 162). The remainder of the collection is mostly comprised of similar later refined wares, such as Ironstone and White Granite ware types introduced in the nineteenth century and readily available into the early twentieth century (Miller et al. 2000: 13). Only six of the recovered artifacts are earlier wares: four pearlware and two creamware sherds. Based on the preponderance of later refined wares, which dovetails with the TPQ dates provided by the three coins (1888, 1892, and 1893), the earliest deposition was within the last decade of the nineteenth century.

All of the coarse earthenware sherds are from utilitarian redware vessels. The high amount of these coarse, utilitarian wares versus finer dining wares is an indicator that Feature 4 was utilized for food preparation.

Four of the six stoneware sherds recovered are temporally diagnostic. Two sherds exhibit Albany/Bristol style slip glazes, which possesses a wide date range; it was introduced in 1880 and was still available circa 1950 (Azizi et al. 1996). Four salt-glazed sherds are from locally produced stoneware vessels.
Of the 33 household glass sherds recovered, approximately half are temporally diagnostic. Eight of the glass sherds are from a mouth-blown jar that exhibits a rounded foot, straight sides, sloping shoulders, and a narrow opening. It exhibits an etched design that features a tobacco pipe over the logo “B&G MAKERS.” The words “MYER… NEW YORK” surround the pipe and logo. To date, this manufacturer and mark have not been identified. Based on the etched tobacco pipe, it is likely from a tobacco retailer or distributor. Although the vessel is mold blown, it is not complete enough to technically identify whether it was blown into the mold via mouth or machine, or the type of mold used. A beginning date of 1864 is based on the introduction of colorless non-lead glass for bottles (Miller et al. 2000: 8).

Other diagnostic specimens include a flat sherd from a large vessel that exhibits molded diamonds (1864–2010) and another sherd that has an applied and tooled packer/English ring finish. This variety of finish was prevalent from 1850 through 1920 (Jones and Sullivan 1985: 39). Four sherds from an embossed mouth-blown bottle were also recovered. Around the base, the letters “…MA…ASS” are visible. The base has the word “CAKING” embossed across it. This vessel was blown by mouth into a Ricketts’ type three-piece mold, prevalent 1821 through 1870 (Miller et al. 2000:8; Society for Historical Archaeology 2012). The final two diagnostic glass sherds are milk glass specimens from unidentified vessels. Milk glass was first introduced in 1743 and has no determined end date (Miller et al. 2000:7).
The majority of the Food Related faunal remains are too fragmented for species level identification. Large terrestrial mammal, avian species, and oyster shell fragments are present.

Six of the ten Personal artifacts recovered are pressed porcelain buttons manufactured using the Prosser process. This type of button was popular from 1840 through 1960 (Sprague 2002: 111–127). A seventh button was made from shell. The final two Personal items consist of an undecorated smoking pipe stem and pipe bowl.

Four artifacts that fall within the Activities group were recovered from Stratum III. Three of these artifacts are mending fragments of a slate pencil. When mended, the repaired pencil would measure approximately 4.5” in length. The fourth artifact is a sherd from a redware flowerpot. Three milk glass lighting vessel sherds were recovered.

Five coins were found, all of which are heavily corroded and the date stamps are not easily discernible. Through the use of x-ray imaging, the date stamps of three of the coins were ascertained. The first is an 1893 Indian Head penny and the second is an 1888 penny (Image 6.39). The 1893 coin provides the TPQ date for Stratum III. The third coin is an 1892 Liberty Head nickel with the characteristic “V” on the reverse. Like the 1893 specimen, the fourth coin is also an Indian Head penny, but it is too corroded to completely discern the date stamp; only the digit “8” is recognizable. Indian Head pennies were minted between 1859 and 1909 (Yeoman 2000: 94); therefore, this specimen could date to either anytime within the 1800s or 1908. The fifth coin was too heavily corroded for identification.
The final artifact from Strata III is the lid to either a toothpaste jar or similar-shaped squat jar. This artifact would have most likely possessed a paper label. It is constructed of whiteware, which was introduced in 1805 and mass produced by 1815 (Azizi et al. 1996). Toothpaste was sold in such containers until the introduction of toothpaste in squeeze tubes in 1896 (Miller et al. 2000: 15).

Stratum IV was also a demolition horizon associated with the destruction of Feature 4. The fact that nearly half (46%) of the 324 artifacts recovered from Stratum IV are Architectural remains lends credence to this hypothesis. Household artifacts accounted for 30%. Table 6.15 summarizes the totals from each functional group. The composition and character of this stratum are similar to Stratum III.

Table 6.15: Feature 4 [2010], Stratum IV, functional groups.

<table>
<thead>
<tr>
<th>FUNCTIONAL GROUP</th>
<th>ARTIFACT COUNT</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>3</td>
<td>.92%</td>
</tr>
<tr>
<td>Architectural</td>
<td>137</td>
<td>42.2%</td>
</tr>
<tr>
<td>Commercial</td>
<td>3</td>
<td>.92%</td>
</tr>
<tr>
<td>Electrical</td>
<td>1</td>
<td>.3%</td>
</tr>
<tr>
<td>Food Related</td>
<td>26</td>
<td>8%</td>
</tr>
<tr>
<td>Hardware</td>
<td>1</td>
<td>.3%</td>
</tr>
<tr>
<td>Household</td>
<td>89</td>
<td>27.4%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>24</td>
<td>7.4%</td>
</tr>
<tr>
<td>Lighting</td>
<td>2</td>
<td>.61%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>1</td>
<td>.3%</td>
</tr>
<tr>
<td>Ornament</td>
<td>16</td>
<td>4.9%</td>
</tr>
<tr>
<td>Other Personal</td>
<td>3</td>
<td>.92%</td>
</tr>
<tr>
<td>Personal</td>
<td>16</td>
<td>4.9%</td>
</tr>
<tr>
<td>Sanitary</td>
<td>2</td>
<td>.61%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>324</strong></td>
<td></td>
</tr>
</tbody>
</table>

Most of the Architectural remains consist of fragments of non-diagnostic window pane. The only diagnostic artifacts are seven fragments of the same pressed/ridged privacy glass (1850–1950) found in Stratum III (Early Office Museum 2012). The remainder of the Architectural assemblage consists of unidentifiable nail, unidentified square nails, and floor tiles of various materials.
A single electrical-related artifact was recovered: a fragment of a carbon rod that is probably part of a carbon arc lamp. A Russian army engineer named Paul Jablochkoff invented practical carbon arc lamps for commercial purposes in 1876 (Miller et al. 2000:15; Woodoff 1997:3). The first American version is attributed to Charles Brush in 1877 (Woodhead et al. 1984; Woodoff 1997:3). Brush also brought electric carbon arc street lighting to Manhattan in 1880 (Woodoff 1997:3). Although the technology originated three years earlier, it is more appropriate to use the date of 1880 for this carbon rod, as this is when arc lighting first came to Manhattan.

The Food Related group consists of a single oyster shell and 26 faunal elements, the majority of these are avian species. Of the 89 household artifacts 71% were ceramics and 29% were glass.

Among the ceramic sherds are refined earthenware, coarse earthenware, stoneware, and porcelain. A larger number of utilitarian/serving wares (i.e., coarse earthenwares and stonewares) further supporting the hypothesis that Feature 4 [2010] was utilized for food preparation and service was carried out elsewhere.

Among the 21 refined earthenwares are later whiteware, whiteware/pearlware, and Rockingham, though some earlier nineteenth-century wares (pearlware and creamware) were also recovered.

At first glance, the refined earthenware assemblage appears to indicate an early-nineteenth century deposition. Unfortunately, this view is based on a small collection. Nearly half of the refined earthenware types have a long duration. The nine sherds of whiteware represent a ware type available from 1815 and into the twentieth century, if not still available today. When considered
along with the TPQ date of 1895, provided by the Indian Head penny, it seems more likely that the whitewares are from the later end of their date range(s).

The pearlware/whiteware category refers to sherds of such a small size as to make final identification difficult. The date range utilized is an amalgamation of two wares’ standard date ranges and any discernible decorations. Because final ware identification is problematic, the assigned date ranges are of minimal use when dating this deposit.

The presence of the earlier refined earthenwares is interesting. Nearly half of the refined assemblage consists of late-eighteenth to early-nineteenth century wares. If the pearlware/whiteware sherds are considered to be pearlware, these earlier wares account for half the assemblage. If, based on the TPQ, this stratum was deposited circa 1895, why are so many earlier refined wares present? Further, if Feature 4 [2010] was utilized as an outdoor kitchen, one would not expect any tableware in the assemblage. This suggests that the artifacts within Feature 4 are the result of secondary deposition.

A total of 36 coarse earthenwares were recovered from Stratum IV. All but one of these are sherds from redware utilitarian vessels. Most of these are slipped, incised, or mottled lead-glazed specimens. The single non-redware coarse sherd is a rim sherd from a British buff-bodied drinking vessel. This specimen exhibits a slightly everted lip and is slip-decorated with slipped dots. This ware type was prevalent from 1670 through 1795 (Azizi et al. 1996).
Three of the four stoneware sherds are from salt-glazed vessels with gray/buff bodies. These sherds do not exhibit any overt signs of local production (kiln damage, underfiring) or any other diagnostic characteristics, though it is quite likely that they were in fact locally produced.

Two Chinese export porcelain sherds were recovered from Stratum IV. The first is painted with an unidentifiable design and cannot be ascribed a date. The second exhibits a European neo-classical pattern. Such decorations were prevalent from 1765 through 1810 (Madsen and White 2011:116).

Most of the Household glass artifacts specimens do not exhibit enough characteristics for dating purposes. Many are clearly blown into a mold, but cannot technically be ascribed to either mouth- or machine-blown manufacture. As no machine-made bottles were recovered, it is likely that they were mouth blown into the mold.

Even among the “diagnostic” glass sherds, most of the specimens do not offer much temporal data. For instance, there are six colorless non-lead glass sherds that range from 1864 to 2010. The range for this type of glass is too wide to offer much depositional insight.

Of the non-diagnostic glass, two varieties bear extra description. The first is the “cased” glass sherds. This refers to flat pieces of clear glass layered with blue glass. These sherds could originally be from a large tableware vessel, a lampshade, or a stained glass pane. The second variety consists of a small dark green container sherd that exhibits a roughly etched *fleur de lis*. 
Other artifacts include two sherds from redware flowerpots, which are not temporally diagnostic. A third Activity-related artifact is a section of a wood and graphite pencil. This specimen possesses a round “lead” and has a portion of the metal eraser socket on the dorsal end. Round graphite “leads” were introduced shortly after the 1876 Centennial Exhibition by the Joseph Dixon Crucible Company. The year 1880 saw the introduction of rubber erasers inserted into metal bands at the pencils’ tops (Early Office Museum 2012). The pencil suggests a deposition at the very end of the nineteenth century.

A coarse earthenware rim/body sherd from a saggar, which is utilized in the manufacture of pottery, comprises the Manufacturing group. A saggar is a box constructed of highly refractive clay in which finer ceramics are kilned. Sixteen sherds of pressed pale green glass were found. Based on these sherds, the original vessel would have been tall and multi-sided with a molded bowl and a hollow stem. The ultimate utility of this item is unknown, but it appears to have been an ornamental piece or freestanding decoration.

Three Commercial artifacts were recovered from Stratum IV, all of which were heavily corroded coins. One specimen was identified as an 1895 Indian Head penny. The remaining two coins are also pennies, but are too corroded to identify the date.

Among the sixteen personal items recovered, thirteen are fragments of the leather upper from a boot or shoe. Grommets and lace hooks are present as is remnant lining. There were two fragments of white ball clay smoking pipes and a porcelain Prosser process collar button. The production date for the button is circa 1840 through 1960 (Sprague 2002: 111–127). The final artifacts are
two sherds from a sanitary vessel; a gray bodied, salt-glazed stoneware chamber pot that may have been locally produced.

Stratum V was the first stratum that was likely not associated with the demolition of Feature 4. The soil matrix was noticeably different -- very dark and organic -- and the amount of demolition debris/architectural remains dropped significantly. Based on its soil and its stratigraphic position, Stratum V and its assemblage may be associated with the everyday activities that occurred within this small structure. However, analysis of the artifacts reveals that this was probably not the case as the assemblage is more indicative of secondary deposition. Additionally, there are items similar to Stratum III and IV found within the layer.

A total of 203 artifacts were recovered from Stratum V. Three-quarters of these artifacts are Household artifacts (55%) and Architectural remains (25%). Table 6.16 summarizes the totals from each functional group.
The majority of the Architectural remains consist of fragments of windowpane and unidentifiable nails. Two tiles (marble and slate), a brick fragment, and two copper alloy nails round out the assemblage. The copper alloy nails are both small in size, which indicates that they are most likely tacks or brads. One specimen is too corroded for identification, but, as the second specimen is a cut specimen, the first is also likely cut. The cut nail specimen was too corroded to determine whether or its head was attached via hand (1790) or machine (1805). Wire nails are common after circa 1885 and mostly supplant the cut varieties (Miller et al. 2000). It is generally accepted that cut nails are used historically between 1790 and 1885–1890. A fragment of a carbon rod, which was part of a carbon arc lamp, was also recovered.

Few Food Related faunal remains were found. Of the ones that were include a single clam shell fragment and eight bones too fragmented for species level identification.
The bulk of the Household artifacts are ceramics. Only eleven Household glass artifacts were recovered. Of the 101 Household ceramics, nearly two-thirds (62%) are refined earthenware, 20.7% are stoneware, and 11% are porcelain. As opposed to Strata III and IV, the Household ceramics are predominately refined, not utilitarian, wares. Refined earthenware and porcelain account for three-quarters (n=75) of the household ceramics. If Feature 4 [2010] were a kitchen and Stratum V the first potentially intact horizon within the structure, one would expect more utilitarian items than tablewares. Instead, the ratio is reversed. A larger number of faunal remains would also be expected. This suggest that Stratum V may not an intact horizon and is rather an episode of fill similar to the previous strata. Additionally, many of the recovered ceramics are small in size and weight, also indicative of secondary, not primary, deposition. Based on the household ceramics in general, Stratum V was probably fill deposited around the same time as Strata III and IV.

Similar to Stratum IV, the ratio of earlier refined wares versus later examples appears high. Creamware (47.62%) and pearlware (17.46%) accounts for nearly two-thirds (65.08%) of the assemblage, while later refined wares (whiteware, Rockingham, and Victorian Majolica) only account for 27% of the refined wares. Based on the dates provided by a Celluloid pen nib holder (1907) and the Indian Head penny (1882), one would expect the ratio to be reversed. This disparity is the result of secondary deposition. The refined earthenwares in the assemblage include many ware types, decorative elements, and time span, also a condition of the nature of the stratum as a secondary deposit. The artifacts from Stratum V may have little to do with actual activities occurring within Feature 4 [2010].
The coarse earthenwares consist of five sherds of redware: four are lead-glazed and one is decorated with an all-over slip. None of the redware are temporally diagnostic.

The 21 stoneware sherds recovered comprise a mixture of eighteenth-century white salt-glazed specimens and somewhat later local products. This mixture is also a product of secondary deposition. There are three sherds of white salt-glazed stoneware. The first two are small and the decoration is unidentifiable. The general date range for white salt-glazed stoneware is 1720 through 1805, but it was rarely available for sale after 1790 (Miller et al. 2000: 10). The third sherd is scratch blue, a form of white salt-glazed stoneware prevalent between 1735 and 1783 (Noel Hume 2001: 206).

The bulk of the stoneware assemblage consists of salt-glazed stoneware. Four of these exhibit kiln damage or underfiring, indicative of local manufacture. As with much of this ware type, these specimens are an example of local products from the nearby Crolius/Remmey pottery. It is likely that the remaining eight specimens are also of local manufacture.

One dozen porcelain sherds were recovered from Stratum V. Generally speaking, the diagnostic specimens fall within the late-eighteenth to early-nineteenth century. Eight of the porcelain sherds consist of hard paste or export varieties that do not possess enough characteristics for relative dating. The four diagnostic porcelain sherds all reflect somewhat similar dates. The latest bone china sherd is part of a London-shape teacup with a blue-printed Chinese landscape. The London shape for teacups was popular from 1810 through 1855 (Jefferson Patterson Park 2017). The remaining two bone china sherds are too small to fully identify the shape or decoration, so they
can only be assigned a very general date. Bone china was introduced to the European market in 1794 and is still technically available today (Miller et al. 2000: 9). That being said, these specimens are most likely contemporaneous with the other porcelain specimens. The final diagnostic porcelain sherd is a painted British soft paste specimen. It exhibits a dark blue underglaze printed design. Such decorations on British soft paste porcelain began circa 1760 and ended circa 1840 (Jefferson Patterson Park and Museum 2012; Miller et al. 2000:9).

One Activity-related artifact was recovered: a Bakelite plastic holder for pen nibs. It is approximately 6” long and exhibits a red and black swirled pattern. Bakelite was patented in 1907 and is still used for some products today (Miller et al. 2000: 16). As the swirled pattern is reminiscent of tortoiseshell, it is possible the nib holder is made of an earlier plastic. Celluloid plastic was used to manufacture imitation mother of pearl, tortoiseshell, amber, coral, and ivory between 1868 and 1920 (Miller et al. 2000: 16). The Commercial group contains an 1882 Indian Head penny (Image 6.40). This artifact provides the definitive TPQ date for the stratum. The Activity and Commercial items date almost a century later than the majority of the ceramic assemblage.
Other artifacts include two underfired sherds of kiln furniture or kiln wasters, eleven smoking pipe fragments, and two buttons. The buttons include one of a heavily corroded copper alloy with a loop shank and one cut from oyster shell. There are two fragments of lead from an unknown manufacturing process (smelting, bullet casting, or window pane construction).
Two fragments from chamber pots were recovered. The first is a rim sherd from a lead-glazed redware vessel. The second specimen consists of a buff-bodied salt-glazed sherd that it is underfired, generally a sign of local production. The final artifact recovered from Stratum V is a doll head constructed of molded hard paste porcelain. Remnant black paint is discernible on the doll’s molded hair.

Stratum VI is the second stratum likely not associated with the demolition of Feature 4 [2010]. Like Stratum V, the amount of demolition debris/architectural remains is significantly less. Stratigraphically, it was at the same vertical depth as the stone footers that support the main brick structure. This may indicate that Stratum VI is associated with the original construction of Feature 4 or lay beneath the floor surface of the structure.

Almost half of the 203 artifacts recovered from Stratum VI fall within the Household artifacts (49%) functional group. Architectural remains account for 20%. Table 6.17 summarizes the totals from each functional group.

Table 6.17: Feature 4 [2010], Stratum VI, functional groups.

<table>
<thead>
<tr>
<th>FUNCTIONAL GROUP</th>
<th>ARTIFACT COUNT</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>1</td>
<td>.49%</td>
</tr>
<tr>
<td>Architectural</td>
<td>22</td>
<td>10.8%</td>
</tr>
<tr>
<td>Commercial</td>
<td>1</td>
<td>.49%</td>
</tr>
<tr>
<td>Household</td>
<td>47</td>
<td>23.1%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>13</td>
<td>6.4%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>1</td>
<td>.49%</td>
</tr>
<tr>
<td>Personal</td>
<td>10</td>
<td>4.9%</td>
</tr>
<tr>
<td>Total</td>
<td>203</td>
<td></td>
</tr>
</tbody>
</table>
Half of the Architectural artifacts consist of clear window glass fragments. Five frosted fragments of window pane that may have been from an office door(s) were recovered. Two nails were also found.

The great bulk (89%) of the 47 Household artifacts are ceramic specimens. Only five sherds of glass were recovered, none of which is temporally diagnostic. The Household ceramics consist of refined earthenwares (39%), stoneware (30%), coarse earthenwares (22%), and porcelain (9%).

Most of the refined earthenwares are creamware (62.5%). These sherds are undecorated and fall within the standard creamware date range (1762–1820) (Miller et al. 2000: 12). Pearlware is also well represented at 25%. All of the pearlware sherds have polychromatic designs painted under the glaze. This decorative style was prevalent from 1795 through 1830 (Miller et al. 2000: 12).

The final sherd is a small sherd of whiteware. Its small size precludes decoration and vessel type identification. Whiteware became popular in America circa 1815 and is still currently produced (Miller et al. 2000: 13). Technically, this artifact provides the TPQ date for Stratum VI. As it is the only definitive sherd of whiteware present, the possibility exists that it is intrusive. If this is the case, the pearlware sherds may more accurately place the deposition of Stratum VI in the late-eighteenth to early-nineteenth century.

Among the nine coarse earthenware sherds are four fragments of lead-glazed redware from utilitarian vessels. An additional four sherds are from British buff-bodied slipware vessels. Three of these sherds are lead-glazed and one exhibits an unidentifiable slip-decorated pattern. The final coarse earthenware is a coarse buff-bodied sherd with a green-tinted tin glaze on both surfaces.
This specimen may be an example of either Iberian or Mexican tableware, though its small size makes final identification difficult.

Many of the stoneware sherds consist of gray or buff-bodied wares with a salt glaze (42%). One of these sherds is cordoned and painted, but exhibits a blotchy salt glaze and is underfired. These characteristics indicate local manufacture at the nearby Crolius/Remmey pottery (Janowitz 2008). It is likely that the remaining four salt-glazed sherds are also local products.

Five sherds of white salt-glazed stoneware exhibiting rouletted rims were also recovered. White salt glaze was available from 1720 through 1805, but is rarely found after 1790 (Miller et al. 2000: 10).

Other artifacts in the assemblage include a single copper alloy coin too corroded to identify the date and a printer’s type block. The type block is constructed of a molded copper alloy and exhibits the word “AYRES.” This could represent a proper name or, possibly, an earlier spelling of Buenos Aires.

Eight of the ten Personal artifacts are undecorated stem fragments of white ball clay smoking pipes. None of these are temporally diagnostic. Two copper alloy straight pins were also recovered.
The ultimate function of Feature 4 is difficult to determine. The structure’s placement adjacent to the rear of City Hall clearly indicates some function associated with City Hall. The form of the structure, with the fireplace-like southern bay, seems to indicate its function as an outdoor or summer kitchen. However, the slab is only 0.2’ above the stone footers that support portions of Feature 4’s walls and is surrounded by a demolition fill strata. This position indicates that the slab was either meant as flooring or is merely coincidental demolition fill.

The artifacts, while plentiful, are mostly small in size and encompass many functions. If Feature 4 [2010] was a kitchen, one would expect artifacts associated with food preparation and a larger quantity of Food Related faunal material. Instead, many examples of tableware and large amounts of architectural debris were recovered. The small size of the artifacts is indicative of secondary deposition; these items were broken elsewhere and eventually redeposited into the convenient void formed by Feature 4’s walls. One clue to the deposition date is a slip-glazed stoneware sherd that is from a vessel recovered within the interior fill of Feature 3. Based on the TPQ dates of Stratum III – 1893, Stratum IV -- 1895, and Stratum V – 1882, this deposition occurred near the very end of nineteenth century. None of the information recovered offers any insight into Feature 4’s original function.

Two features were found beneath Feature 4 [2010]. Feature 6 [2010] consisted of a small rectangular wooden box (shaft feature) found in the approximate center of Feature 4 (Image 6.41). The feature measured 1.7’ from east to west by 3’ from north to south. Horizontally, it was located at the top of Stratum VI -- the final surface uncovered within Feature 4 -- which places the top of
the shaft at approximately 4.6’ bd. The feature itself was constructed of thin wooden planks (Image 6.42).

Image 6.41: Plan view of Feature 6 [2010], facing north.
The soil matrix within the planks (Stratum I) consisted of 3.1’ of mottled brown (10YR 4/3) and very dark grayish brown (10YR 3/2) medium sands with gravels and small rounded cobbles. There was banded micro-stratigraphy throughout, though these bands were lamellar in nature and can be attributed to the passage of water as opposed to deposition. Beneath the observed base of the box, two additional strata were encountered: Stratum II and III. Stratum II consisted of white (10YR 8/1) clayey sand. Stratum III consisted of light gray (10YR 7/1) medium sand. Each of these strata was approximately 0.1’ thick, which puts the overall feature depth at 3.4’ below Stratum VI, or 8.0’ bd (Map 7.29). All of the strata were very damp, also indicating the constant presence, or passage, of groundwater.

A total of 222 artifacts were recovered from Feature 6. One hundred and ninety-six were recovered from Stratum I and twenty-six were recovered from Stratum II. No artifacts were recovered from Stratum III.

Of the 196 artifacts recovered from Stratum I, the bulk (81%) were Architectural remains. Table 6.18 shows a breakdown of the functional groups recovered from Stratum I.

<table>
<thead>
<tr>
<th>FUNCTIONAL GROUP</th>
<th>ARTIFACT COUNT</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural</td>
<td>159</td>
<td>81.1%</td>
</tr>
<tr>
<td>Food Related Fuel</td>
<td>1</td>
<td>.51%</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>.51%</td>
</tr>
<tr>
<td>Household Indeterminate</td>
<td>26</td>
<td>13.2%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>2%</td>
</tr>
<tr>
<td>Personal</td>
<td>5</td>
<td>2.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>196</strong></td>
<td></td>
</tr>
</tbody>
</table>
Two-thirds of the Architectural remains \((n=109)\) consisted of damp fragments of the wooden planks that formed Feature 6; these were retained as a sample. No speciation was completed. Thirty-seven nails were recovered and twenty-three were cut specimens too corroded to determine whether or not their heads were attached via hand (1790) or machine (1805). As cut nails are still utilized in certain industries today, only the beginning date of 1790 can technically be attributed to this portion of the assemblage (Miller et al. 2000). Wire nails are common after circa 1885 and mostly supplant the cut varieties (Miller et al. 2000). As the recovered specimens are iron, and milled steel begins to be used for cut nails circa 1890 (Wells 2000), the general assumption is that the cut nails are used historically between 1790 and 1885–1890.

Ten of the recovered nails were fasteners from the wooden plank box. These are heavily corroded, though not badly enough that it could be determined that they are essentially square. Unfortunately, the level of corrosion is too great to determine whether or not they are square cut nails or square wrought nails. The remainder of the Architectural assemblage consists of thirteen fragments of window glass.

The Food Related functional group consists of the hinge portion from an oyster shell. Four recovered faunal are too fragmented for species identification.

Twenty-six Household related artifacts were recovered. Most of these artifacts are sherds from ceramic vessels. Only three sherds from glass vessels were recovered. The ceramic assemblage consists of refined earthenware \((n=15)\), stoneware \((n=5)\), and coarse earthenware \((n=3)\) specimens.
The refined earthenwares are generally split between creamware and pearlware sherds. There are two whiteware sherds.

The pearlware sherds provide some chronological detail. The first specimen is a molded rim sherd that exhibits even-scalloped shell-edging and curved lines. This decoration was prevalent from 1800 through 1835 (Miller et al. 2000: 12). Five of the pearlware sherds exhibit blue floral painting that is under the glaze. This style ranges from 1775 through 1830 (Miller et al. 2000: 12).

The two whiteware sherds exhibit transfer printed decorations that cannot be identified. Transfer printed whiteware dates circa 1815 through 1915 (Azizi et al. 1996). These sherds represent the TPQ for Stratum I; no other artifacts could have been deposited before 1815.

Three of the stoneware sherds are salt-glazed specimens with gray or buff bodies. One of these exhibits a dark brown lead-glazed interior and an Albany-type slip-decorated exterior. This style of decoration was prevalent from 1805 through 1940 (Azizi et al. 1996). The only other temporally diagnostic stoneware specimen consists of a white salt-glazed sherd from an unidentified teaware. White salt-glazed stoneware was popular circa 1720 to 1805 (Miller et al. 2000:10).

Three coarse earthenware sherds were recovered. Two of these sherds are redware specimens. One is lead-glazed and the other exhibits incised lines on the exterior. Neither is temporally diagnostic. The final coarse earthenware specimen is a sherd from a British buff-bodied mug. It is slip-decorated and exhibits a series of dots along its rim.
Five Personal artifacts were recovered from Stratum I. Four of these artifacts consist of stems from white ball clay smoking pipes. One of the specimens exhibits the remains of a green lacquer. Some pipes had a glazed tip. The fifth personal item is a cast copper alloy button with a broken shank.

Only 26 artifacts were recovered from Stratum II. Twenty-four of these consisted of thin, damp fragments of wood which once formed the wooden walls of the feature. One faunal fragment of a medium terrestrial mammal was recovered. The final artifact is a heavily corroded square nail embedded in a fragment of mortar.

Feature 6 [2010]’s initial appearance suggested a small privy. Excavations revealed few artifacts and no soil horizons characteristic of privies. The only organic material were fragments of the wooden box itself. Its small size and position near the center of Feature 4 would also appear to preclude its usage as a privy. Feature 6 was more likely a drainage feature for Feature 4 [2010]. The medium-grained sand and gravel mix inside the box would allow for the passage of water and the observed lamellae lends credence to this hypothesis. Therefore, it is likely that Feature 6 [2010] was a sump, an internal drain for the outbuilding.

Although very few temporally diagnostic artifacts were recovered, the presence of early- to mid-nineteenth-century artifacts (i.e., whiteware) probably indicates that Feature 6 was concurrent with Feature 4. If Feature 6 was a sump designed to keep Feature 4 dry, then it is likely that they are contemporaneous. Historic research indicates drainage problems at City Hall, which would have made on-site drainage solutions necessary (McComb family papers 1787–1858).
Feature 7 [2010] was encountered beneath the northeast corner of Feature 4 [2010] at 4.6’ bs. It consisted of a relatively small stone shaft with an interior diameter of 2.8’ (Image 6.43). Feature 7 [2010] initially appeared to be a brick-lined shaft capped with slabs of schist and brownstone. The schist footer slabs that support the brick portion of Feature 4 [2010] were attached directly to the visible interior slab(s) cap and outer brick ring. The northeast corner of Feature 4 [2010] obscured most of the shaft’s northern and eastern portions.

Excavation revealed that the initially visible brick upper structure was a three course thick collar. Bricks appear to date to the eighteenth century. Beneath this collar and even with Stratum VI of Feature IV [2010], the actual shaft began. It was constructed of small slabs of brownstone and reached a depth of approximately 3.2’ below the first stone course (7.8’ bs). The first several courses of stone exhibited evidence of sand mortar between them. This is generally indicative of a privy or cistern as opposed to wells, which are generally not mortared. The tight conditions and poor lighting made confirmation of mortar at greater depths impossible.
Six horizons were encountered during the excavation of Feature 7. Strata I through IV were located inside the shaft. At the surface of the feature, Strata I and II appeared to be concentric rings with Stratum I located on the inside (Image 6.44). Excavations revealed Stratum II to be a narrow and thin (0.4’ wide by 0.2’ thick) ring adjacent to the inner face of the shaft. Stratum I consisted of fill and exhibited a pronounced slope to the south. The remainder of the strata exhibited generally level interfaces with each other. Strata V and VI were beneath the shaft and represented sterile C horizons composed of glacial till.
Image 6.44: Feature 7 [2010], east profile.
A total of 101 artifacts were recovered from Feature 7 from Strata I through IV. No artifacts were recovered from Strata V or VI. Table 6.19 lists the amounts of material recovered from the artifact-bearing strata.


<table>
<thead>
<tr>
<th>FUNCTIONAL GROUP</th>
<th>ARTIFACT COUNT</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Architectural</td>
<td>35</td>
<td>34.6%</td>
</tr>
<tr>
<td>Household</td>
<td>54</td>
<td>53.4%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>5</td>
<td>4.9%</td>
</tr>
<tr>
<td>Lighting</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Personal</td>
<td>5</td>
<td>4.9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>101</strong></td>
<td><strong>4.9%</strong></td>
</tr>
</tbody>
</table>

Most of the materials are split evenly among Architectural remains and Household artifacts. Most of the Architectural remains consist of fragments of window and nails. Two of the nails are square nails, but too corroded to determine whether they are cut or wrought varieties. The remaining Architectural artifacts consist of a white marble floor tile, a slate roofing tile fragment, and a glass tile. The glass tile is 0.5” thick and likely from a skylight or other specialized window.

Nine faunal elements were recovered, including a piece of the pelvis of a domestic cat. The remaining elements were too fragmented for species identification. The Household artifacts consist mainly of ceramic sherds. Only four Household glass sherds were recovered. One is a body sherd from a black or dark green dipt mold bottle.
Half of the ceramics are refined earthenwares: 20 creamware, 6 pearlware, and 5 whiteware sherds. One creamware sherd exhibits an overglaze printed design that cannot be identified. This decorative style was popular on creamware from 1765–1815 (Miller et al. 2000: 12). Three of the undecorated creamware sherds exhibit light heat damage. A lightly burned sherd of pearlware was also recovered. This specimen exhibits an underglaze painted floral design and a yellow band around the rim. Pearlware that exhibits this decorative technique dates from 1795 to 1830 (Miller et al. 2000: 12).

Four additional pearlware sherds possess visible decorative elements. The latest specimen exhibits a stipple printed pattern, a decorative style prevalent from 1803 through 1830 (Miller et al. 2000:13 and Jefferson Patterson Park 2017). The next specimen is from an unidentified hollowware and has both printing and engraved lines. The interior possesses an underglaze printed black border of hexagonal cells, which then had a clobbered orange pigment. The exterior exhibits a panel of underglaze printed small diamond cells, which were also then clobbered, but with a light blue pigment. Clobbered refers to painted over the glaze on an underglaze printed pattern. Underglaze printing on pearlware was prevalent from 1783–1830 (Miller et al. 2000:13). The final two decorated pearlware sherds consist of painted body sherds exhibiting blue floral patterns popular from 1775 to 1830 (Miller et al. 2000: 12).

Three of the whiteware sherds exhibit a blue transfer print decoration. The first consists of a rim sherd from a Willow-pattern plate, which dates from 1815 through 1915 and provides the TPQ date for the assemblage (Azizi et al. 1996). The other two sherds have an indiscernible pattern.
Six coarse earthenware sherds were recovered. Three sherds are slip decorated in the Lower Delaware Valley style, a variety of redware popular from 1740 through 1820 (Azizi et al. 1996). One sherd is from a British buff-bodied slipware vessel. The slip decoration is of the trailed variety, which was popular from 1670 through 1795 (Azizi et al. 1996).

Also among the ceramics are nine stoneware and four porcelain sherds. Two of the porcelain sherds are Chinese export porcelains: one is a painted saucer rim, and the other is also likely from a teaware.

Three of the nine stoneware sherds consist of gray or buff-bodied specimens with salt glazes. They are underfired and exhibit a light salt glaze. These characteristics indicate local production at the Crolius/Remmey pottery, which operated upon nearby Potbakers Hill from 1720 to 1820 (Janowitz 2008). A sherd from an Albany-type slip vessel was also recovered. This variety of slip decorating was prevalent from 1805 through 1940 (Azizi et al. 1996). Also recovered were a sherd of white salt-glazed stoneware and another slip-decorated sherd.

The two Personal items are an undecorated smoking pipe stem and bowl fragment. One sherd from a frosted lamp globe was recovered. There is also a shoulder sherd from a gray salt-glazed stoneware ink bottle. This artifact is likely from a “master” bottle, which was used to fill individual ink bottles.

Although four visibly different strata were documented, they provided consistent dates throughout. Strata I, III, and IV contained whiteware sherds, which provide a TPQ of 1815. Although Stratum
II did contain a creamware sherd, it is very likely that the sherd is contemporary with the whiteware. Therefore, one can conclude that this shaft was filled after circa 1815, consistent with the TPQ date provided by the lowest stratum of Feature 4 [2010].

Based on the fact that the interior surfaces of Feature 7 [2010] were mortared, it can be surmised that the shaft was likely a narrow, shallow cistern.

**WATER SYSTEMS AND DRAINAGE**

There have been many cisterns recovered at City Hall Park. Four cisterns were constructed as part of City Hall’s original construction to aid in fire prevention. They would also form part of a large drainage system that repurposed previously existing structures.

The original construction of City Hall included the construction of four cisterns at each corner of City Hall. In 1811, the Common Council mandated the construction of four such cisterns, two per each of City Hall’s wings. These structures were “to be supplied from the roof thereof... the water [to] only be used at fires” (Koeppel 2000:124). These cisterns were specifically designed for fire suppression. All four are referenced on the 1834 Fireman’s Guide Map and have been documented archaeologically (Map 6.17). Three of the cisterns were exposed in 1999 and two were exposed in 2010 (Table 6.20).
Map 6.17: Fireman’s Guide Map (1834) showing the four fire suppression cisterns around City Hall.
Table 6.20: Brick cisterns constructed contemporaneously with City Hall.

<table>
<thead>
<tr>
<th>Feature #</th>
<th>Year Excavated</th>
<th>Identification</th>
<th>Location</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>120</td>
<td>1999</td>
<td>Cistern</td>
<td>East Path/ Northeast side of City Hall</td>
<td></td>
</tr>
<tr>
<td>170</td>
<td>1999</td>
<td>Cistern</td>
<td>East Path/ Southeast corner of City Hall</td>
<td></td>
</tr>
<tr>
<td>Feature 12</td>
<td>2010</td>
<td>Cistern</td>
<td>West Path/ southwest corner of City Hall</td>
<td>Same as Feature 40 [1999]</td>
</tr>
<tr>
<td>Feature 20</td>
<td>2010</td>
<td>Cistern</td>
<td>West Path</td>
<td></td>
</tr>
</tbody>
</table>

These cisterns employed a natural resource—rainwater—via the roof gutter system. The rainwater runoff was directed into four cisterns that anchored the four corners of City Hall. Any overflow from the cisterns was then directed into the brick and stone drainage system that extended into the southern portion of the property.

The four cisterns were all domed brick structures that were likely exposed at surface level. They had a central stone lined box shaped opening which served as an access point for a pumping apparatus. The four cisterns, all of which have been identified archaeologically, have an average of 16’ in diameter. Observation of the interior of one of the cisterns identified a thin plaster lining and an attachment for a drain pipe that allowed the cistern to receive water. City Hall still exhibits the vestiges of the gutter/downspout system that directed the rainwater into the cistern (Image 6.45).

At some point during the nineteenth century, a stone and brick drainage system was installed connecting at least two of the four cisterns to an expanded system documented in the northeast area behind City Hall. The system then continued into the east end of the property, along the western path adjacent to City Hall and continuing south, and to the north in the vicinity of Tweed.
Courthouse. Located at an average of 2.3’ below surface, this expansive feature suggests that the area surrounding City Hall was approaching its modern grade by the time this system was constructed. The drains were generally constructed of three courses of brick that lay atop an interlocking brick floor. Large bluestone slabs were mortared together to form the cover of the (on average) 2’ wide drains.

The drain system connected and utilized obsolete shaft features as an overflow system for the cisterns that had been constructed as a fire-fighting measure. These cisterns collected rainwater runoff from the City Hall roof and then the drains diverted excess water into the shaft features and eventually to lower elevations on the property.

Map 6.18 presents the nineteenth-century cisterns and drainage features that have been documented in relation to the 2010 Plan View Map of City Hall. Table 6.21 presents a listing of the associated features. A brief description of these features, beginning with a cistern along the west path, follows.
Image 6.45: Circa 1900 image of City Hall showing downspouts extending from the roof into the areaway (Library of Congress online digital collection).
Map 6.18: CHARM layer depicting nineteenth cisterns and drainage features that have been documented in relation to the 2010 Plan View Map of City Hall.
The west path provided the best look at the form and function of the City Hall era cisterns and their relation to the larger drainage system. Feature 20 [2010] was the cistern located at the northern extent of the West Path trench (Map 6.18). It was a large, round brick shaft feature with a domed cap (Image 6.46). The dome is relatively steep and placed directly upon the straight-sided brick walls of the shaft. In the approximate center of this cap was a roughly 2’ wide square opening with a collar constructed of sandstone slabs; it most likely originally consisted of four sandstone slabs. The West Path trench uncovered an 8.4’ wide by 14.0’ long section of Feature 20. Although the entire shaft was not exposed, the overall size could be extrapolated. The distance from the center of the square opening to the southern edge of Feature 20 was 7.4’, which is the radius of the overall circular shaft. Therefore, Feature 20 was 14.8’ (d=2r) in diameter, 46.47’ in circumference.

### Table 6.21: Drainage System Features

<table>
<thead>
<tr>
<th>Feature #</th>
<th>Year Excavated</th>
<th>Identification</th>
<th>Location</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feature 8</td>
<td>2010</td>
<td>18th century well</td>
<td>Northeast</td>
<td>Re-purposed from original function</td>
</tr>
<tr>
<td>Feature 5, 9, 10, 11</td>
<td>2010</td>
<td>Brick and stone drain</td>
<td>Northeast</td>
<td></td>
</tr>
<tr>
<td>Feature 12</td>
<td>2010</td>
<td>Cistern</td>
<td>West Path</td>
<td>Same as Feature 40 [1999]</td>
</tr>
<tr>
<td>Feature 13</td>
<td>2010</td>
<td>Drain</td>
<td>West Path</td>
<td></td>
</tr>
<tr>
<td>Feature 16</td>
<td>2010</td>
<td>Drain</td>
<td>West Path</td>
<td></td>
</tr>
<tr>
<td>Feature 18</td>
<td>2010</td>
<td>Stone shaft feature</td>
<td>West Path</td>
<td>Re-purposed from original function</td>
</tr>
<tr>
<td>Feature 19</td>
<td>2010</td>
<td>Drain</td>
<td>West Path</td>
<td></td>
</tr>
<tr>
<td>Feature 20</td>
<td>2010</td>
<td>Cistern</td>
<td>West Path</td>
<td></td>
</tr>
<tr>
<td>Feature 120</td>
<td>1999</td>
<td>Cistern</td>
<td>West Path</td>
<td></td>
</tr>
<tr>
<td>Feature 170</td>
<td>1999</td>
<td>Cistern</td>
<td>West Path</td>
<td></td>
</tr>
<tr>
<td>Feature 44</td>
<td>1999</td>
<td>Brick catch basin</td>
<td>West Path</td>
<td></td>
</tr>
<tr>
<td>Feature 57</td>
<td>1999</td>
<td>Brick and stone drain</td>
<td>West Path</td>
<td></td>
</tr>
<tr>
<td>Feature 46-93-94 and 95</td>
<td>1999</td>
<td>Brick and stone drain</td>
<td>West Path</td>
<td></td>
</tr>
</tbody>
</table>
(c=πd), and covered an area of 171.95 square feet (πr²). The interior of feature 20 was not investigated.

Feature 19 [2010] was a brick drain that attached to Feature 20 [2010] (Map 6.18 and Image 6.47). It began at the southern edge of the cistern and traveled downslope for 9.6’ in length before intersecting with another shaft feature (Feature 18). Feature 19 [2010] was designed to siphon excess rainwater from Feature 20 [2010]. It would drain the water “downhill” to the south, where it entered Feature 18 [2010].

![Image 6.46: Feature 20, brick shaft feature with domed cap.](image)
Image 6.47: Feature 19, a brick and stone capped drain that was connected to and extended south from the adjacent Feature 20 [2010].
Feature 18 [2010] consisted of a 7’ diameter stone-lined shaft feature located 9’ south of Feature 20 [2010] and adjacent to Feature 17 [2010] (Map 6.18). The top the feature was capped with bluestone slabs that are mortared to the shaft rim (Image 6.48). Feature 19 [2010], the drain section, connected to the northern edge of this shaft and was mortared into it. The bluestone slabs from Feature 19 [2010] appeared to continue on top of this shaft and formed a portion of the cap.

The top of Feature 18 [2010] was encountered at 4.25’ bs, which was deeper than the surrounding features. It was either designed or altered to accept rainwater overflow from Feature 20 [2010]. Based on the stratigraphy and nature of the connection of Feature 19 [2010], this most likely happened when the fire-suppression system was installed in 1811. When considering similar shaft features encountered within City Hall Park, Feature 18 [2010] most resembles a well such as Features 8 [2010] and 30 [2010]. It can be surmised that the original top of Feature 18 [2010] was once closer to the current grade and the shaft was partially deconstructed in order to serve as a sump/drain for Feature 20 [2010] built circa 1811. It is also possible that Feature 18 [2010] was a purpose-built structure, though it appears too similar to other earlier shaft features for this to be the case.
Feature 16 [2010] was another segment of the drain system. It was oriented perpendicular to the West Path trench (Map 6.18). The exposed portion of Feature 16 [2010] was 9’ long and was 1.8’ feet wide. It was constructed of two parallel courses of brick with a 1’ gap between them (Image 6.49). The space between the courses was filled with later fill and a cast-iron pipe. The western extent of Feature 16 [2010] butted up against a round modern storm sewer; the cast-iron pipe fed into this later addition.
Feature 16 [2010] was oriented towards City Hall and may have once been connected to a downspout. It did not appear to connect to either of the nearby cisterns, though the excavation only offered a narrow view of the overall area. It is possible that it turned north or south in order to connect to one of the cisterns past the trench, though this seems unlikely. It seems more likely that any downspout connection to the cisterns would have taken a direct route. Although Feature 16 [2010] was attached to the modern storm sewer drain, it most likely did not do so originally. Feature 16 [2010] approaches the modern sewer at an oblique angle as it does not lead directly into the sewer and instead just barely intersects the northern portion of the sewer. The location of the cast-iron pipe suggests reuse of the feature. The pipe was placed as close to the feature’s southern wall as possible to ensure that the pipe entered the later sewer. This indicates the expedient usage of the nineteenth-century drain when the later system was installed. Feature 16 provided a ready-made trench to protectively place the pipe in and guide it towards the modern sewer. Unlike Features 13 [2010] and 19 [2010], bluestone slabs did not cap the segment of drain. It can be surmised that when the cast-iron pipe was installed into the existing drain, the slabs were simply not replaced.
Feature 12 [2010] consisted of a large brick cistern located near the southern extent of the West Path (Map 6.18) at 2.6’ bs. The entire northern/southern length of this feature was uncovered, revealing it to be 16’ in diameter. This indicates a circumference of 50.24’ and an area of 201 square feet. Feature 12 [2010] was covered with a domed brick cap that was relatively shallow in comparison to Feature 20 [2010]. The dome was attached to a “stepped” base, as opposed to being placed directly on the vertical walls of the shaft. A mortar or plaster wash was applied to the brick cap, most likely to protect the exterior after burial. In the approximate center of this cap was a roughly 2’ wide square opening with a collar constructed of sandstone slabs. The domed cap was
divided into quadrants by mortared bricks that extended from the collar in a cruciform pattern. A second smaller, 1’ wide square opening was located in the southeast quadrant of the shaft.

The interior of the cistern was approximately three-quarters full with brick and mortar rubble and sandy soil unevenly distributed. The interior was faced with a plaster skim coating and approximately 0.6’–0.8’ of water was observed at the bottom of the cistern. Along the eastern wall of the feature interior was an inlet connection with an attached ceramic a pipe (Image 6.50). This inlet appeared to be directly in line with the location of the roof gutter downspout observed in historic photos.

Feature 12 [2010], another of the covered cisterns designed for fire suppression similar to Feature 20 [2010], is located adjacent of a corner of City Hall in the southwest corner. The top of Feature 12 [2010]’s dome is 0.5’ feet deeper than that of Feature 20 [2010]. This suggests a southern downward slope in the historic grade of City Hall Park.
Feature 13 [2010] was another segment of brick and bluestone drain that extended from the southern edge of Feature 12 [2010] at a gradually lowering elevation (Map 6.18 and Image 6.51). Feature 13 [2010] traveled southward for 8’ before curving to the east and it continued beyond the excavation limit. Overall, 10’ of the drain was exposed, corresponding to the extent of construction. The drain itself was constructed similarly to other portions: three courses of brick and capped with bluestone slabs.
Image 6.51: The connection of the brick and stone capped drain (Feature 13 [2010]) extending south from a cistern (Feature 12 [2010]) located along the West Path.
Feature 13 [2010] was designed to siphon excess rainwater from Feature 12 [2010] and drain the water “downhill” to the south, possibly either to a leech field or another repurposed shaft. It was likely constructed at the direction of the Common Council along with the cistern in 1811 (Koeppel 2000: 124). However, it is possible that Feature 13 [2010] represents a later addition to the cistern. The presence of the medicine bottle in the assemblage could indicate that the drain was added towards the end of the nineteenth century. The observed stratigraphy only supports this theory if one assumes that the entire cistern was unburied. The same horizon caps and surrounds all seven of the features in the West Path area, which indicates concurrent burial. It seems unlikely that the entire fire-suppression system was reexcavated in order to add a single drain (or even two). The presence of the later artifact is probably due to the large opening on the cistern’s top, which would have made a convenient disposal site.

The West Path exhibits vestiges of the nineteenth-century construction and development of City Hall. Only one potentially pre-nineteenth-century feature was exposed: Feature 18 [2010], the stone shaft feature that was repurposed for drainage.

In the northeast area behind City Hall, four sections of the nineteenth-century drainage system were uncovered: Features 5 [2010], 9 [2010], 10 [2010] and 11 [2010] (Map 6.19). Throughout the area, the flagstones that capped the drains were exposed at varying depths providing insight into the original elevations of the property. Each drain segment was constructed of brick with a bluestone base and was capped with bluestone slabs (Image 6.52). The drains were approximately 2’ wide and three courses tall (0.6’) (Image 6.53). The bluestone slabs did not completely overlap
the brick portions as brick was visible on either side of the slabs. The first of these drains to be exposed was Feature 5 [2010] (Image 6.54).

Feature 5 [2010] sloped downward from west to east into Feature 3 [2010]. The end of the drain aligned with an opening in the western wall of Feature 3 [2010].
Image 6.52: Feature 9 [2010], representative plan view.
Image 6.53: Feature 11 [2010], representative profile.
Features 9 [2010], 10 [2010], and 11 [2010] were situated on the eastern side of Feature 3 [2010]. Feature 11 [2010] extended from an opening on the eastern side of Feature 3 [2010] at a slightly lower elevation than Feature 5 [2010], sloping downward and into Feature 8 [2010], which was an eighteenth century stone well (Images 6.55 and 6.56). Feature 9 [2010] was a split drain that directed runoff into the northern end of Feature 8 [2010] and continued into Feature 10 [2010]. Feature 10 [2010] continued to slope downward to the east and into the eastern trench wall into an unexcavated area.
The drains appear to continue to the east side and from the norther end of the property. Feature 9 is part of a feature that was partially uncovered in 1999 (PES 1999). According to field notes, in 1999 Feature 46 was identified 1.4’ below surface. The feature was described as being capped with cut stone that was removed to reveal a brick lined drain that PES noted was possibly associated with the First Almshouse. The sides of the drain line were composed of five courses of brick. Ultimately the drain line turned toward City Hall. Bankoff and Loorya concluded that this feature dated to the nineteenth century and was associated with City Hall (Bankoff and Loorya 2008).

This assessment appears to hold up when taking into account the more recent 2010 excavations and features. The depth below datum at which these drains were uncovered ranges from 1.7’ bd (Feature 5 [2010]) at the western end to 3’ bd (Feature 10 [2010]) at the eastern end of the northeast area. This demonstrates a distinct slope eastward from the west and the north.

The drainage system is similar in form and construction to that exposed along the western path of the property, making use of pre-existing features, or structures, in the landscape. Based on the analysis of Feature 3 [2010] and Feature 8 [2010], it is likely that the section of the drainage system labeled as Feature 5 [2010] was constructed post 1850, the construction date of Feature 3. Based on the similarity of form and materials, Features 9 [2010], 10 [2010], and 11 [2010] are contemporaneous with Feature 5 [2010].
The complex of features consisting of Features 8 [2010], 9 [2010], and 10 [2010] consists of two distinct parts. The first consists of Feature 8 [2010], a former stone well, and the series of covered brick drains (features 9 [2010], 10 [2010], and 11 [2010]) attached at a later time.

Feature 8 [2010] consisted of a large, circular, and unmortared stone shaft with an outside diameter of 8.7’. It was encountered at approximately 3.1’ bs. Large rectangular slabs of schist/bluestone capped Feature 8 [2010] when it was discovered.

Features 9 [2010], 10 [2010], and 11 [2010] consisted of drains that fed into Feature 8 [2010]. Features 9 [2010] and 10 [2010] were encountered at the same depth below ground surface as Feature 8 [2010]: 3.1’ bs. Feature 11 [2010] was located at a slightly higher elevation than Feature
8 [2010] and drained down into it. Feature 9 [2010] extended from the eastern side of Feature 8 [2010] and curved to the southeast for approximately 17’ (Map 6.18). The full extent of this feature was not uncovered as the excavations in the northeast did not extend beyond the eastern side of City Hall. This being said, it is likely that Feature 9 [2010] was once connected to a downspout on the northeastern corner of the building. Feature 9 [2010] wrapped around the northeast of Feature 8 [2010] and extended 5’ to the north.

Although Feature 9 [2010] did not physically enter Feature 8 [2010], a lead pipe was driven through the shaft and into the drain, presumably to alleviate overflow in Feature 9 [2010]. Feature 10 [2010] was a small section of drain that extended 3’ from the north of Feature 8 [2010]. It directly entered the shaft, draining water from somewhere to the north of City Hall. Feature 11 [2010] also directly entered the shaft. It connected to the western side of Feature 8 [2010] and the drainage system extended west and lay atop Feature 3 [2010]. Whether Feature 11 [2010] was designed to alleviate overflow from one of the two cisterns located at the western end of the northeast area or was once connected to a downspout in that area is unknown. For the purposes of this discussion, Feature 11 [2010] will refer to the section of drain that bridged the 22’ between Features 8 [2010] and 3 [2010].

Based on the construction and depth below surface of these four interconnected features, Feature 8 predates the drains. Feature 8 [2010] was an earlier well associated with the Almshouse. When City Hall was under construction, the well was filled and capped. At a later point, when drainage issues arose at City Hall, the brick drainage system was added and funneled into the earlier well.
Along the east path, Feature 120 [1999] was described as a brick domed cistern with a center stone box located 34’ feet south and 12.5’ east of the northeast corner of City Hall. Based upon the description of the cistern, as well as historic maps and documentation, it is similar to other known nineteenth century cisterns.

Feature 170 [1999] was the fourth City Hall era cistern feature located near the southeast corner of City Hall. The top of the feature was constructed of red granite and its interior depth was measured to 11’ feet below surface with a 15’ diameter.

Feature 44 [1999] was a circular dry-laid stone “catch basin” that measured approximately 3’4” in interior diameter and slightly over 5’ in its exterior diameter at 21” bs (PES 1998-1999). The feature had been capped with three long tabular stones. Excavation of the basin interior revealed several soil layers, but no artifacts except for some decaying wood at the bottom of the feature. This is likely an earlier shaft feature that was also repurposed for the larger drainage system.

Supporting this identification is Feature 57 [1999], a drainage line that slopes downward and into Feature 44 [1999]. The drain line was constructed of stone and brick.

The above-mentioned Feature 46 [1999] was cut stone capped brick lined drain exposed at 1.3’ bs. The sides of the drain line were composed of five courses of brick. Further excavation revealed that the drain line turned toward City Hall.
Feature 93 [1999] abutted Feature 46 [1999] and was a possible builder’s trench. Feature 95 [1999] was referred to as a “cut stone alignment” that may have been a shaft feature from either a well or cistern. The Feature 46 [1999] drain line leads out of this alignment on a downward slope.

The artifacts from Feature 46 [1999] were collected from three contexts: overburden, the drain interior, and the builder’s trench (which may have been part of Feature 93 [1999]). There were 29 artifacts recovered from the builder’s trench context. Most were building materials including brick, charcoal and clinker, and copper nails. None of the artifacts were clearly dateable except for a late-nineteenth or early-twentieth century glass bottle sherd. The one brick sample taken was from a late-nineteenth century brick.

Approximately 100 artifacts were recovered from the overburden context. In addition to the building materials, a two piece metal button, three pipe stems with a 5/64 bore measurement, some liquor bottle sherds, a medicinal vial, two medicinal bottles, five buttons made of porcelain, bone and wood, and several sherds of lamp glass were recovered. Dateable ceramic wares in the assemblage included whiteware (post-1815) and Ironstone (post-1840). Two artifacts of note in this assemblage are a bottle of Phalohs Magic Hair Dye No.2, with the address 197 Broadway, and an animal tooth with a small hole drilled through its center, possibly for adornment. A date was not found for Phalohs Magic Hair Dye.

Artifacts recovered from the drain interior included building materials and coal and clinker. Among the building materials were twenty-five small copper nails. Other artifacts included a copper eyehook, copper pins, five buttons, including one bone and two shell buttons, pipe stems
with bores measuring 4/64 and 5/64, various types of bottle glass, lamp glass, a flowerpot, and a slate pencil. Dateable ceramic wares included one sherd of transfer-print pearlware (1800-1840) and whiteware (post-1815). One artifact of note is a disk, possibly made of celluloid, labeled “Sam’l Gardiner Jr Patented No. V. 29136”. A search of the United States Patent Office web site identified patent No. 29136 as having been issued July 1860.

Based on field notes and descriptions, Features 44 [1999], 46 [1999], 57 [1999], 93 [1999], and 95[1999] are all part of the nineteenth-century drainage system. Another likely part of this system is Feature 30 [2010], located in the vicinity of Tweed Courthouse. This was a stone well that also appeared to have a southward sloping drain line (Feature 31 [2000]) connected to it. Modern construction constraints prevented excavation’s wide enough to confirm this.
Map 6.20: CHARM layer depicting documented archaeological features associated with the drainage system and a projection of the potential span of the system.
The nineteenth century construction works, beginning at the turn of the century, would dramatically alter the landscape of the Common. In the early-nineteenth century, the property was renamed City Hall Park in honor of the “new” City Hall. Several demolition and building episodes would occur throughout the nineteenth century: the demolition of the Bridewell in 1838; the repurposing of the Gaol as a Hall of Records until its eventual demolition in 1903; and the construction of the Second Almshouse, which was eventually destroyed by fire in 1854. Construction works included the building of the post office at the southern point of City Hall Park, fountains, and the Rotunda. The Rotunda foundation was documented as Feature 89 [1999].

The 1861-1881 construction of Tweed Courthouse was one of the final construction events that brought City Hall Park to its present day form. This construction was a massive undertaking and it likely eradicated most archaeological evidence of the Upper Barracks and the Second Almshouse. It would also disturb/disinter dozens of human burials. Evidence of this has been seen throughout the area surrounding Tweed Courthouse in the form of disturbed/impacted graves and disarticulated human remains recovered from several areas.

**ADDITIONAL NINETEENTH CENTURY FEATURES**

Features 50 [1999], 64 [1999], 65 [1999], and 74 [1999] in the East field of City Hall Park were excavated in conjunction with one another. All were trash pits with similar soil depositions. A stratigraphic analysis was able to link the four features, which appear to be a series of pits (Map 6.21).
Feature 74 [1999] was identified as a circular feature located 3’ in diameter. Excavated in two levels, the feature exhibited a high artifact density with a significant presence of faunal elements.

Unlike the majority of features on site, the Feature 50-64-65-74 [1999] assemblage is not dominated by Food Related artifacts. Instead Architectural elements account for almost half the assemblage. The Food Related artifacts are overwhelmingly consumption and serving based.

Amongst the ceramic wares, earthenware is dominant. However, unlike the majority of the site in which creamwares are dominant, pearlwares account for 56% of this assemblage, suggesting a somewhat later use-date. The TPQ for the deposit is 1795 based on decorated pearlwares.

Feature 63 [1999] was located in the east field area of City Hall Park at 22” bs. Excavation revealed a dense layer of architectural debris and stones. The stones formed part of a substantial load bearing wall according to PES field notes. Artifacts excavated in association with the feature include a bone button blank (found inside the wall), pipe stems, and several dateable ceramic sherds,
including creamware and pearlware. The most recent ceramic ware present was a piece of red transfer-printed pearlware that dates from 1818–1840. PES’ initial field assessment of this feature labeled it as being City Hall East’s privy. The artifacts date to within that range. There is no indication within the field notes of the presence or absence of night soil and there is no other documentation to support, or refute, this association. However, it would be highly uncommon for a privy to contain a load bearing wall as privies tend to be shaft features. It is also possible that this structure was associated with the Gaol.

Located along the western edge of City Hall Park, Feature 30 [1999] would have been located within the boundary of the two western barracks structures. It was a trash deposit feature that was irregularly shaped and contained two strata. However, this feature was only sampled and not fully excavated. As a result, it has limited analytical value. However, the MCD of 1802 suggests a much later dumping period.

Feature 58 [1999] was a shallow, basin shaped trash pit. This feature contained a significant amount of butchered bone compared to artifact remains, which led to the conclusion that Feature 58 [1999] was a bone disposal midden. The location of Feature 58 [1999] would have placed it in the immediate location within the footprint of the British barracks on the western side of the property and north of the Bridewell. Therefore, it likely post-dates the barracks.

The artifacts from this feature were predominantly Food Related, which represent 50% of the assemblage. Architectural artifacts comprise the second largest category at 31%. Overall, feature 58 is a relatively small assemblage containing 398 artifacts.
Of the Food-Related artifacts, 76% are for consumption and serving while 22% are for preparation and storage.

With respect to ceramic wares, earthenware is dominant and contains 49% Pearlware, 27% Creamware, and 9% Redware. Most of the pottery, especially the earthenware, dates between 1780 and 1840. The MCD is 1792. Within the glass category, bottles make up a significant portion of the category. Aside from alcohol bottles, remnants of medicinal bottles were also present.

Architectural remains included small sherds of window glass as well as brick and nails, both square-cut and round-cut. One particularly interesting artifact was a possible knife handle with a mother-of-pearl inlay.

The date and location of this feature link it to the Bridewell, which operated from 1775 – 1838.

Feature 101 [1999] was a twentieth century fill deposit uncovered alongside a brick formation. Excavation revealed a herringbone patterned brick walkway bordered with stones. Beneath the bricks was a compacted red sand layer. The brick samples taken from the feature are all eighteenth century bricks. Other artifacts include building materials such as window glass, square-cut nails, and a single bone button blank. Datable ceramic wares from this feature include creamware (1762-1820), pearlware (1775-1840), and white salt-glazed stoneware (1720-1805). The material analysis dates this feature to the nineteenth century. Reuse of bricks was not uncommon and the path was likely installed during the landscaping of the park just prior to or during the construction of City Hall.
Feature 89 [1999] was part of the nineteenth-century Rotunda. It was a partially exposed rounded stone foundation that cut through the eastern portion of the eighteenth-century Feature 84 [1999] deposit.

The wall was constructed of large mortared stones (approximately nineteen to twenty inches each) in three courses. The height of the wall was twenty-three inches. According to field notes, the interior of the wall was filled with rubble that was not excavated. Feature 89 [1999] was within Feature 84 [1999], a significant trash deposit that existed above Feature 89 [1999], and below the exterior of the stone wall.

**SUMMARY**

The selection of this site and the ensuing construction of City Hall would spur a complete transformation of the property formerly known as the Common. Along with the construction of City Hall came the relocation of indigent populations away from the new city center. Almshouse residents were moved to Bellevue and eventually even the prisons would move from the area. Following closure of the Bridewell in 1838, the Almshouse building was demolished and the Gaol, on the east side of City Hall, was repurposed. The Gaol served as the Hall of Records and remained so until the early years of the twentieth century when the building was demolished.

The transformation of City Hall Park from institutional to municipal use was effectively accomplished within 25 years. Throughout the nineteenth century and into the early twentieth century, various modifications and works occurred with vigor throughout the new City Hall Park. Among the structures built and subsequently demolished during that time were the Rotunda, the
Post Office at the extreme southern end of the park, and a fountain. The most transformative
collection was that of Tweed Courthouse (1877-1881).

Following the construction of Tweed Courthouse, City Hall Park would rapidly take on its present-
day form. The 1901 construction of the subway also altered aspects of the landscape. Though the
park’s transformation was complete by the mid-nineteenth century, the former Gaol building
remained extant, though repurposed, until 1903.

With that final demolition, the only remnants of the property’s institutional past would be in the
archaeological record: a complex landscape highlighting a history of long-term use, population
density, and urban transformation.
VII: CONCLUSIONS

The choice of using City Hall Park as the subject of this dissertation began in the early 2000s. At that time, it was projected to be a straightforward Post-Processual research project. Preliminary theoretical questions were hypothesized based on the known history of the site and a general knowledge of the archaeological assemblage. With that, an analysis focused on the composition, formation, and interpretation of the trash deposits excavated in 1999 commenced.

During review it soon became apparent that such an analysis, while theoretically suited to the materials assemblage and structural features recovered, was not tenable. There were crucial information gaps in the field documentation that compromised interpretive analysis of the formation of these features.

In analyzing the primary documentation, it became apparent that the information was not cohesive as there was a lack of the context and, at times, provenience required to develop an informed/comprehensive analysis of the trash deposit features and the site itself. To best understand how the analysis was compromised, it is necessary to understand the site within the context of historical archaeology.

Since the development of the Post-Processual theoretical paradigm in Anthropological Archaeology, archaeological investigations and research designs have generally focused on pre-determined “questions that count” prior to the commencement of field work. These question(s) seek to explore issues pertaining to past populations, cultural groups, trends, motivations,
consumerism, and a wide range of other general and specific historic socio-cultural issues that guide and shape fieldwork and the research gathering process.

There are distinct differences in the practical application of archaeological research between academia and Cultural Resource Management (CRM). Formulating questions upfront and applying post-processual theory is not always plausible in CRM. The academy, with, regard to historical archaeology, subscribes to theory (i.e. questions) first followed by methodology (i.e. excavation and analysis). Historically, this was not always the case. For a brief period in the 1950s and 1960s, the processual movement subscribed to the idea that a project’s scientific approach, fieldwork, and physical evidence should drive the questions being asked. In other words, processual investigations let the available data guide the research. It was a paradigm that placed an emphasis on scientific method and good fieldwork. Aspects of this method were dismissed by the 1970s as the discipline shifted towards a methodology that put hypothesis and theory construction first before fieldwork and data. Many post-processual studies are theory heavy, and fieldwork and data light.

None of the excavations within City Hall Park were excavated as academic archaeology projects. Rather, they were all undertaken as part of the CRM process.¹

Post-processual archaeological theory attempts to ask the modern researcher to plausibly understand the actions, motivations, and behaviors of those living in the past. There are several divides to cross in order to come to any such understanding, with temporal and cultural among the

¹ Within the United States the majority of archaeological projects are undertaken as part of CRM, as opposed to academic design academy (SHA 2012).
most prominent. “Statements about past behavior and its interpretation are sometimes untested assumptions raised to the status of laws. While some or all these statements may be true or probable, they remain assumptions” (Bankoff and Loorya 2008:592). To assume their absoluteness as fact is ethnocentric and can be misleading. The archaeological work done at City Hall Park embodies the difficulties in applying the practice of treating hypothetical or theoretical assumptions as law.

There are several post-processual theoretical questions that can be asked of the City Hall Park site, some of which were posed at the beginning of this dissertation. These questions are based on the known history of the property, not the archaeology. However, it soon became apparent that a traditional post-processual approach to the study of the 1999 City Hall Park assemblage (and project) would need refinement.

It should not be assumed that there is archaeological evidence to answer predetermined theoretically questions. It should first be asked if the data is viable to be used for post-processual theoretical analysis. In essence, is there a stable context for research and interpretation? In this context, the answer was simply no. The best documented excavation in City Hall Park prior to 2010 was the 1989 Brooklyn College field school. The largest/richest material assemblage comes from the 1999 CRM project, yet that was the least documented or contextualized of the excavations. The 2010 project, also restricted by its CRM status, nevertheless permitted the collected data to aid in a processual review. Due to the lack of context and documentation, it was impossible to adequately interpret and use the 1999 data for comparative analysis in concert with portions of the 2010 project. For example, an attempt was made to compare Feature 28 [2010] with Feature 88 [1999], but comparison was impossible. The data was different and, inclusive of the level of field
data, was not comparable. The combined data, however, could be applied by the processual process to elicit conclusions.

In preparing to undertake the long-term CRM project at City Hall Park in 2010, some of the limitations of CRM Archaeology became clear. The main advantage academic archaeology has over CRM is time and the ability to choose where to excavate. CRM is based on a construction schedule and what someone else, not an archaeologist, is doing or deems important. CRM does not, and most often cannot, guarantee answers or provide the ability to investigate questions that are posed up front. Inherently, no matter how often Regulatory Agencies continue to ask CRM archaeologists to pose research questions going into a project, the framework of CRM does not allow for a traditional research design. The 2010 CRM project did offer a unique opportunity however. It allowed the archaeologists to gather information that would later be used to establish a more stable context across the entire site.

This dissertation takes a practical, Processual approach to the City Hall Park site. As opposed to examining an overarching question, it takes the data from previous excavations and combines it into a comprehensive form/dataset so that subsequent and more narrowly focused Post Processual questions can be asked. It considers several over-arching themes and presents a base analytical assessment that more definitively identifies dozens of features and several thousand material remains recovered from within City Hall Park. This dissertation has incorporated various streams of historical and archaeology data to develop an overall site assessment.
As noted, City Hall Park is a site that has been excavated multiple times and by multiple archaeologists since 1989. Ultimately, the assessment presented here is based on the recognized need for a comprehensive context for the site and the overall analytical content. The process undertaken for this study relied first and foremost upon a methodology, which is contrary to the majority of current academic historical archaeological studies utilizing the Post Processual approach in the United States.

Though early phases of the CRM process are designed to identify areas of sensitivity and the history of a potential CRM project site, thereby allowing for pre-defined research questions, it is an imperfect process. It is also, by dint of its very existence, a process marred by differing goals. The CRM process is dependent upon, and thus greatly influenced by, the goals of development and construction. The primary role of the CRM archaeologist is to document cultural resources that may be impacted by construction. This does not mean that CRM archaeology cannot be used to answer questions about the past or add valuable information to archaeological research and our understanding of the past. It does, however, require a shift in thought that allows the data to drive the questions being posed.

One of the great limitations of CRM is the inability for archaeologists to determine where and to what extent they will excavate. Many of the features within City Hall Park have been incompletely excavated and documented because they extend beyond the construction footprint. The other great limitation of CRM is time constraints, or the constant pressure of having to adhere to the construction schedule. There are limits to the time allowed for fieldwork and data recovery when a discovery is made, as well as time and funding limits to post-field analysis and research. Yet the
datasets that come from CRM projects are vast and have a considerable amount of research potential. The 2010 City Hall Park CRM project exemplified this fact.

Recently, New York City’s most significant archaeological sites -- the African Burial Ground, Five Points, South Ferry, and City Hall Park -- are all the result of CRM projects. To be able to adequately take research advantage of CRM datasets, good field methods, field documentation, and mapping are of primary importance. Proper methodology ensures that any future archaeologist or researcher who comes to an assemblage post-excavation can understand, reconstruct, and interpret the assemblage. Despite the constraints of CRM practice, it is the ultimate responsibility of the excavating archaeologist to practice a standard methodology, adequately document a site, and provide the necessary information within the accompanying technical report. Without the context of how a site was excavated and the details of provenience, any assemblage is little more than a bunch of broken objects. It is unethical to ascribe meaning without context.

CRM archaeologists must properly document the sites they are contracted to work on, regardless of the methodologies they are at times forced to employ by the construction process. Unfortunately, this does not always occur. Future researcher, confronted with shoddy or incomplete paperwork, may be forced to attempt to reconstruct the site based only on available information or to simply take the initial analysis at face value. Yet consider that several initial assumptions regarding the identification of features and assemblages from the 1999 City Hall Park project have since been proven incorrect. Bankoff and Loorya discussed and discounted the “nearest neighbor” approach that was taken during the preliminary 1999 field analysis (Bankoff and Loorya 2008).
accept the field assessment without going back to consider the raw data in association with the materials analysis only led to the misinterpretation of significant features and assemblages.

If there was hope of being able to consider the City Hall Park site in its complex entirety, and to eventually pose and consider theoretical research questions about the persons who occupied City Hall Park over the course of its history, or its role in the post-war boom of New York City at the turn of the nineteenth century, then the archaeological history of City Hall Park would need to be reconstructed. In order to properly interpret one of the largest and most significant archaeological sites in New York City, researchers have to contradict current accepted theoretical doctrine and take a processual based approach to post-processual research: a processual post-processualism. Before a myriad of questions can be asked -- about the landscape, the people and the politics of what became City Hall Park, and to consider the site as anything more than a microcosm of itself – the creation of a solid contextual baseline for the interpretation of existing information was necessary. This need specifically led to the topic of this dissertation and resulted in the deliberate attention paid to methodology, detail, and documentation during the 2010 – 2013 CRM project.

There are two main components of the baseline assessment presented in this dissertation, with the most prominent and visual aspect being the CHARM and its various layers. The development of this comprehensive map enabled the parsing of several layers or temporal scenarios that were utilized into a fundamental analytical assessment of several of the more significant archaeological features documented from 1989 through 2013. The second component of this assessment is the interpretive analysis of those archaeological features, both structural and material. Features and assemblages are temporally and functionally defined via the CHARM. Due to variations in record
keeping, some of the analytical assessments were more detailed than others, though the basis for further analytical investigation is now summarized in context.

Perhaps one of the more useful outcomes of this dissertation and CHARM has been the ability to look at the inter-relationship of various structural and material features in relation to one another and in conjunction with the historic footprints of the property. Often in historical archaeology, and this is particularly true of some of the previous City Hall Park analyses, there is a hyper focus on individual features with only passing consideration of the surrounding landscape. During the analysis of the 1999 project Bankoff and Loorya asked “what explains the almost complete lack of early eighteenth-century artifacts, the bolus of mid- to late-eighteenth century artifacts, and the fragmentary nature of the nineteenth-century deposits?” (Bankoff and Loorya 2008:594). This study will more fully answer that question, and the answer directly defines the nature of this site.

Further highlighting the nature of CRM archaeology, and as a matter of happenstance, the 1999 project did not encounter anything more than fragmentary nineteenth century remains. This in turn gave researchers a false impression of the archaeological record. In fact, as would be demonstrated during the 2010 project, the nineteenth century is exceptionally well represented. However, it is represented differently than the eighteenth century. In response to the question posed by Bankoff and Loorya, it can be posited that there should be little expectation of dense, or anything other than sparse, archaeological representation of the early-eighteenth century. Prior to the construction and occupation of the first Almshouse in 1735, the area was relatively unoccupied. The one exception was the Harris house, which earlier map studies by Hunter Research places in the vicinity of
Broadway. The relative lack of occupation and ensuing dense occupation and development would likely have impacted any early-eighteenth century depositions.

The later eighteenth century was, as noted, the most densely occupied period of occupation for the Common, or what would eventually become City Hall Park. This density took the form of numerous structures, associated outbuildings, and the number, or volume, of people at the site. The late-eighteen century was also a period when there was no municipal trash pick-up and removal. Trash deposition would have occurred on site. Additionally, there are historic references to the problem of dumping during the eighteenth century by people not occupying the Common depositing refuse on the property. In total, this would be expected to, and did, produce a significant archaeological signature as represented by the Feature 88 [1999] complex.

The impression from the pre-2010 excavations that the nineteenth century was only fragmentarily represented was false, or misleading. First, it was a matter of happenstance that the areas in which previous construction excavations occurred did not impact areas with nineteenth century materials. Second, and more significantly applicable, is that the nineteenth century presents itself archaeologically very differently than the eighteenth century. Artifact deposits, burial features, and disturbed structural remnants characterize the eighteenth century archaeological material. Structural features, reuse, the disturbance of eighteenth century features, and artifact depositions predominating over construction episodes characterize the nineteenth century archaeological material. The one exception is the large early-nineteenth century trash feature representing a single episode that was excavated in 2010.
These characterizations are due to the nature of occupation during each time period. The eighteenth century had hundreds, if not thousands, of people living and working on the Common. These people would have produced prodigious amounts of trash, all of which were deposited on the property. In the nineteenth century, the area became primarily municipal in purpose and people were no longer living on-site in great numbers. Those that were, were removed by mid-century. In addition to becoming a municipal center, the Common was also transformed into a public park. As a result, and perhaps most crucially, regular on-site trash disposal ceased.

It is clear that both the eighteenth and nineteenth centuries are both well represented archaeologically; they just present themselves differently. Creating a comprehensive site map (CHARM) as the focus of this dissertation was chosen because of its viability, and variability, in presenting multiple levels of orientation and inter-relation with regard to the historic and modern context of archaeological resources. It presents significant resources in a temporal and spatial context. Among the most visual reveals is the presence of large midden deposits within the burial ground, as well as a stone circular shaft feature, or a well, within the British barrack compound.

Historical archaeological interpretation often hyper-focuses on isolating features or the differences among people or socio-cultural groups. This dissertation, to some extent, reveals the opposite. The information presented shows that, although differences in social and economic classes obviously existed, there were commonalities among the groups occupying the Common. Throughout much of its history, City Hall Park was densely occupied and ungraded. The site assessment reveals a variety of information about the history and culture of the property and those who occupied it, as well as the formations of the property.
SUMMARY

In summary, some of the main results from the evaluation of the overarching themes included:

1. From a practical perspective, the accepted historical profiles of the eighteenth century almshouse, prison, and barracks assemblages are all surprisingly similar. In the Common, with a lack of clear spatial boundaries between institutions and the area they may have impacted, distinguishing between populations in a material assemblage is difficult. Success necessarily lies within the details or slight differences in composition between deposits. In 2008, Bankoff and Loorya questioned whether historical archaeology’s methods were fine-tuned enough to filter “noise” from a large midden deposit. More specifically, attention to detail, or an awareness of minute differences within small details, can filter some of the “noise”. Doing so demonstrates that the largest eighteenth century trash deposits are not solely the refuse of the British soldiers. While that may seem like a common sense assumption, it is documented via differentiation in detail within a deposit. This concept applied to other deposits throughout the site.

2. In the eighteenth century the Common was densely occupied. During the Revolutionary era, the period of densest occupation, there appears to have been a communal approach toward garbage disposal. Analysis demonstrated that the overwhelming majority of eighteenth century refuse disposal occurred in the relatively undeveloped eastern portion of the Common. Evidence also suggests that care was taken to maintain the area and limit rodent or hog activity in the area.
3. There is evidence that the Almshouse burial ground was also used as a large-scale garbage disposal area. The largest eighteenth century trash feature, the Feature 88 [1999] complex, is within the burial ground area. Furthermore, the presence of post holes and historic documentation about fencing in the burial ground makes the use of this area for trash disposal appear even more deliberate. This may have been due to issues of practicality and space constraints, but it could also be an unconscious contemporary commentary concerning human remains and burials.

4. Analysis has been able to reconstruct a “natural” stratigraphic profile of the property and identify the eighteenth century topography and elevation relative to the modern day landscape. The property was itself relatively level in the eighteenth century compared to the surrounding hilly areas. Other landscape and environmental factors identified include significant changes to the naturally high-water table as a result of the early-twentieth century development of the subway system. Excavation has shown that the stratigraphy is exceedingly complex in some areas, illustrating the area’s long history of dense occupation. Archaeologically, this history manifests itself as temporally integrated features/deposits and stratigraphy.

5. The archaeological landscape is a record of the deliberate transformation of the Common into City Hall Park. This transformation was a demonstration of the growing and prosperous city. New York City had outgrown its original City Hall and sought to build a new a stately structure worthy of the post-Revolutionary city. City Hall was built on a high point at the northern edge of the developed city on the Common. The choice of location was influenced by several factors, including the gentrification that had occurred along Broadway and the area surrounding as the Common was developing. As part of the post-Revolutionary expansion, several professionals
relocated further north along Broadway and near the Common. Many of these new residents were not in favor of the poorhouse or prisons remaining in the area.

6. A great deal of information was documented about the construction of City Hall and those who constructed it. No longer extant, or visible, features of the building were exposed. Construction techniques that took a shallower water table and the use of a substantial retaining wall into consideration were documented. It was also demonstrated that the early-nineteenth century construction workers disposed of their own trash on site in disused shaft structures that needed to be filled in. Lastly, there were deposits reflecting early-twentieth century renovations of the building.

7. There was a deliberate reuse of architectural or structural features documented throughout the property. The most extensive example of reuse was the drainage system that diverted overflow from the four City Hall era cisterns. The cisterns were kept at capacity via water runoff from the roof. A series of drains connected obsolete shafts, or other structural features, as points to catch the overflow around the property. The system ultimately terminated at lower elevations of the property that were away from City Hall. This system also provided additional insight about water and drainage issues on the property.

Parsing the various streams of information and data, along with an initial analysis of the resources depicted on the CHARM, opens the door for future researchers to investigate a variety of questions about the Common, City Hall Park, and its inhabitants as a contextual whole.
The data and analysis in this dissertation provides a site assessment that defines context for volumes of data. It can also serve as a guide for future work within City Hall Park. Ultimately, the information gathered might one day be combined with additional information to provide a more complete picture of the everyday life of the residents of City Hall Park throughout its history. Beyond that, having a stable interpretive context will now allow the site and its inhabitants to be assessed outside of its immediate context and be considered with regard to the larger City.

This dissertation encompasses, brings together, and generally expands questions asked about City Hall Park since 1998. It concludes with a presentation of some of the information gleaned from this study, including the visual depictions of some of the dominant configurations of the area from the eighteenth through twentieth centuries as a sequence of CHARM layers, and ending with a version that depicts all layers and resources. This is a benchmark for further study and interpretive analysis of the various occupations of City Hall Park. It also serves as a template for how a site that was never excavated academically can be transformed into a beneficial Anthropological-Archaeological data framework for academic study. Like the history of New York City itself, this dissertation can be viewed as a story of transformation and reinvention, in this instance the eight acres of an archaeological site known as City Hall Park.
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