

CHAPTER 1

INTRODUCTION

A. Project Background and Scopes-of-Work

The following report describes archaeological investigations carried out in connection with the Capital Center Project in the City of Trenton, Mercer County, New Jersey (Figures 1.1 and 1.2). This project, being undertaken by DKM Properties Corp., involves the redevelopment of the historic Dunhams Block in the downtown core of the city. This block is bounded by present-day North Warren, East State, North Broad and East Hanover Streets and forms Block 14B of the city's North Ward (Figure 1.3). At the time of writing, construction of the Capital Center is well-advanced with an official opening of this multi-use premises planned for later in 1989.

Archaeological investigations were required in this instance under Section 106 of the National Historic Preservation Act of 1966, as amended, as the Capital Center Project is making use of an Urban Development Action Grant (UDAG) awarded by the Department of Housing and Urban Development and administered by the City of Trenton.

The Dunhams Block was the commercial core of Trenton from the mid-18th through mid-20th centuries. Its defining streets were laid out in the 1720s and since at least the 1740s the block's street frontages have been characterized by commercial premises of one sort or another. Residential and commercial development of the block occurred throughout the second half of the 18th century and included the erection of stores, shops, a tavern, upscale town houses and combination residential/commercial properties. From the 1750s until 1870 the city market was located within or adjacent to the block, and for most of the period from 1778 until the first decade of this century the block contained a newspaper office.

Commercial use of the block intensified during the 19th century with the establishment of the Trenton House hotel in 1824 and numerous additional stores, so that virtually all the first-floor street frontages were involved in service industries and retailing. From the late 19th century until after World War II, when downtown Trenton began to experience the urban blight typical of many east coast cities, the Dunhams department store expanded steadily and eventually became the commercial hub of the block.

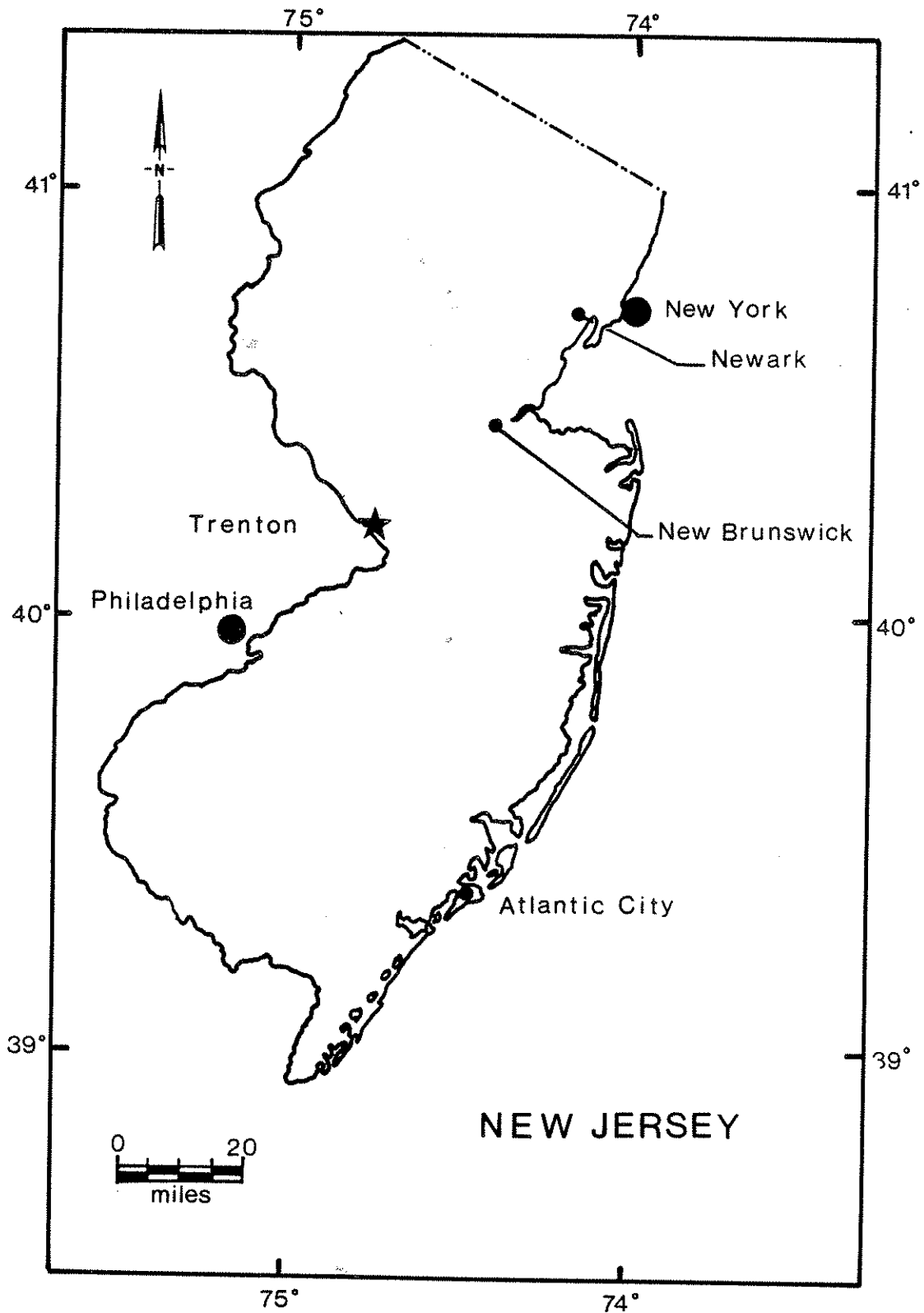


Figure 1.1. Location of Project Site (starred).

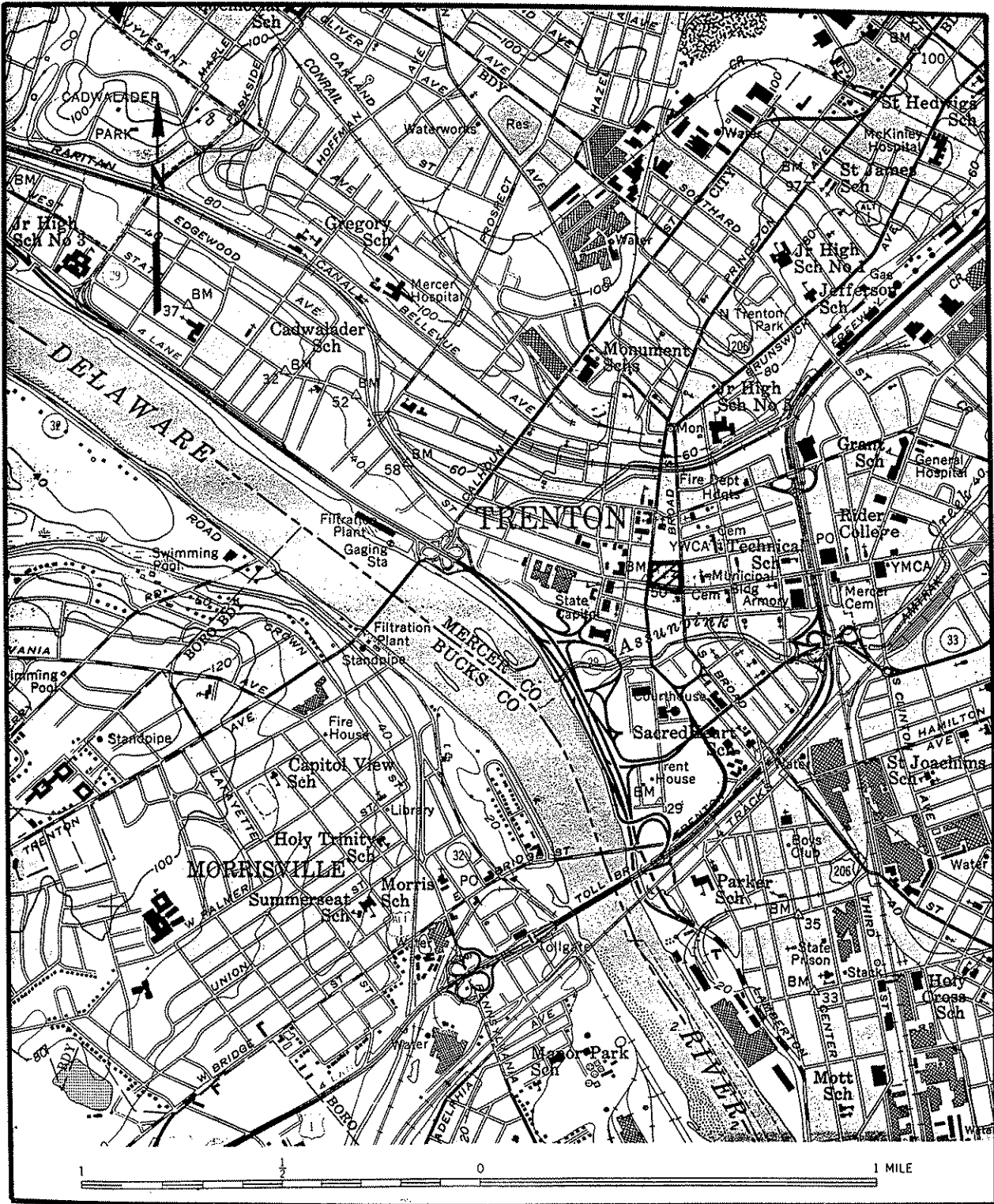
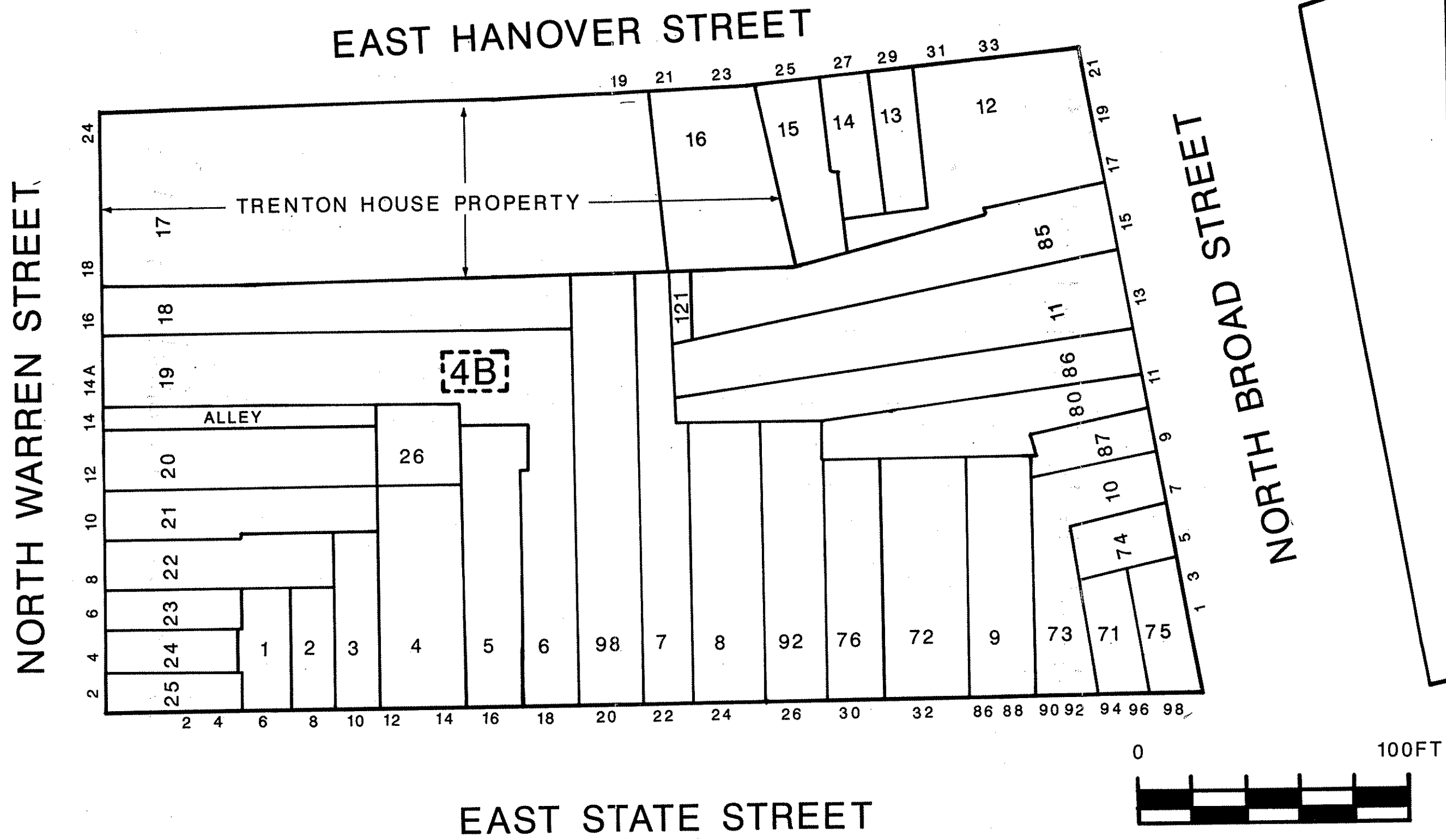


Figure 1.2. Detailed Location of Project Site (outlined).
 Source: USGS Trenton West Quadrangle. 1981.

FIGURE 1.3. DUNHAMS BLOCK PROPERTIES IN 1987



Following standard cultural resource practice a Phase 1 archaeological survey was initially performed for the Dunhams Block. This work, carried out between February 24 and March 31, 1987, concentrated on historic map research, archival studies and a brief program of fieldwork (including limited subsurface testing) designed to establish whether any substantial portions of the block were without basements and therefore likely to contain significant archaeological resources. The southwest quadrant of the block was not studied during the fieldwork operation as DKM Properties Corp. did not own the properties in this area at this time.

As a result of this first phase of work, two parts of the block -- a roughly 30 x 100-foot area within the yard of the former Trenton House hotel (and its predecessor Georgian town house) and the alley between 12 and 14 North Warren Street -- were identified as having some archaeological potential (Figure 1.4; Plates 1.1-1.4). An interim report prepared at the conclusion of this work (Hunter Research Associates 1987a) recommended Phase 2-level archaeological and historical studies for these two areas. The archaeology of the remainder of the Dunhams Block (excluding the southwest quadrant whose potential remained unknown) did not appear promising. Apart from a few small slivers of open ground, sections of re-used foundation and the possibility of a few truncated deep features such as wells and privies, significant archaeological deposits were presumed destroyed through the excavation of basements.

Phase 2 archaeological studies were carried out between April 2 and May 14, 1989, culminating in a second interim report submitted on the latter date (Hunter Research Associates 1987b). The purpose of the Phase 2 studies was to delimit the extent and evaluate the significance of the archaeological deposits identified in the Phase 1 investigations. Significance evaluation was performed using the criteria of the National Register of Historic Places (see below, Chapter 1B and 1C).

Excavations within the yard of the Trenton House revealed a complex, four-and-a-half-foot deep stratigraphic sequence documenting the use of the site from the mid-19th century through to the present day. A variety of cultural features were recorded and are described in greater detail in this report. This archaeological resource was regarded as eligible for listing in the National Register of Historic Places and a final Phase 3-level archaeological investigation was recommended in mitigation of the impact of the proposed Capital Center Project. The second area examined in the Phase 2 studies -- the alley between 12 and 14 North Warren Street -- also produced archaeological evidence of the mid-18th through mid-20th centuries, but was not considered eligible for the National Register on the grounds of its being extremely confined and having a low artifact yield.

FIGURE 1.4. DUNHAMS BLOCK: AREAS OF ARCHAEOLOGICAL STUDY

SOURCE: SANBORN MAP COMPANY 1955

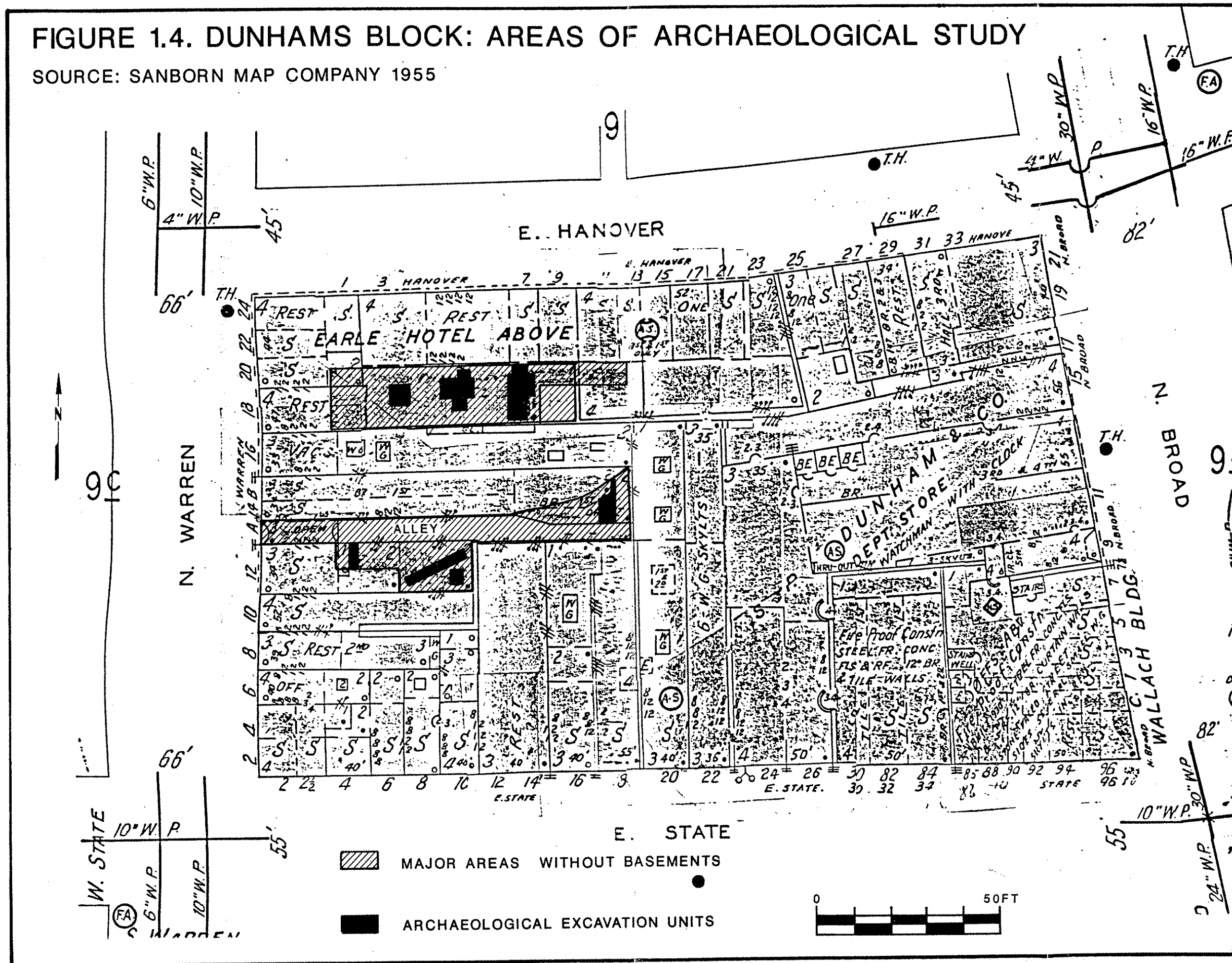




Plate 1.1. General view looking southeast showing northwest corner of Dunhams Block; North Warren Street at right; East Hanover Street at left; Trenton House in center; 16, 14 and 12 North Warren Street to right (Photographer: Richard Hunter, August 1987).

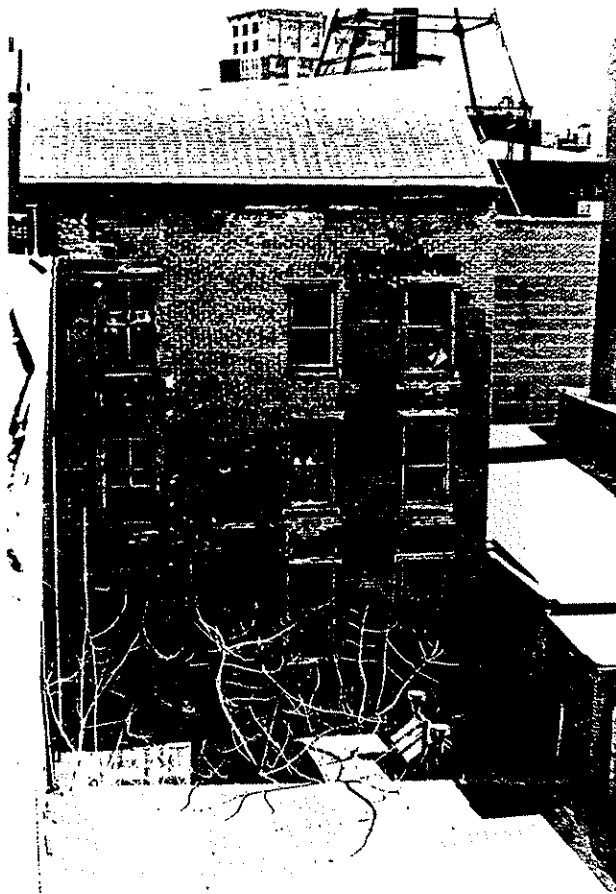


Plate 1.2. General view looking west across yard of Trenton House property towards rear of four-story structure facing on to North Warren Street; principal archaeological excavation areas were below roofs in foreground inside one-story structures erected within former yard (Photographer: Richard Hunter, March 1987).

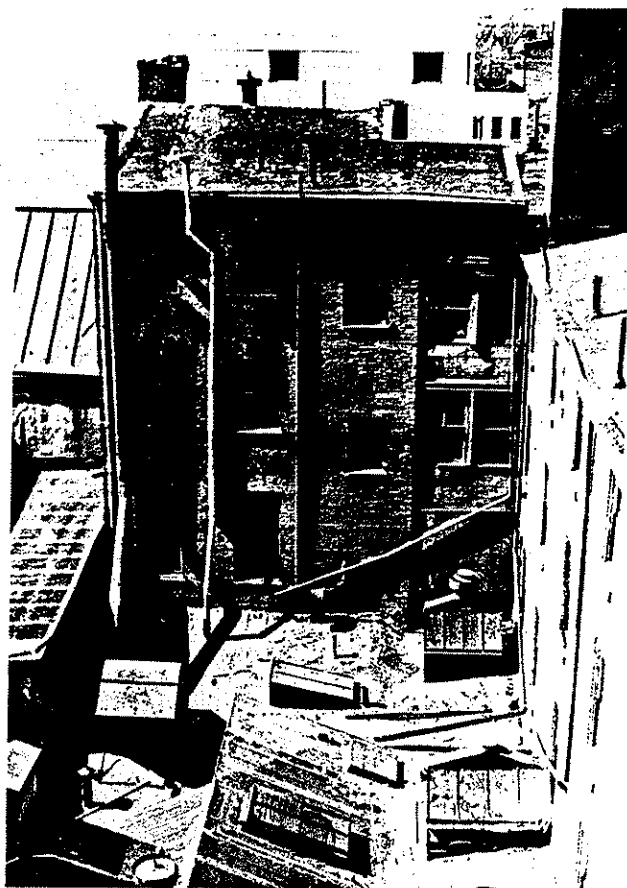


Plate 1.3. General view looking west southwest across yard of Trenton House property; rear wall of front section of 16 North Warren Street visible at top left; principal archaeological excavation areas were below roofs in foreground inside one-story structures erected within former yard (Photographer: Richard Hunter, March 1987).

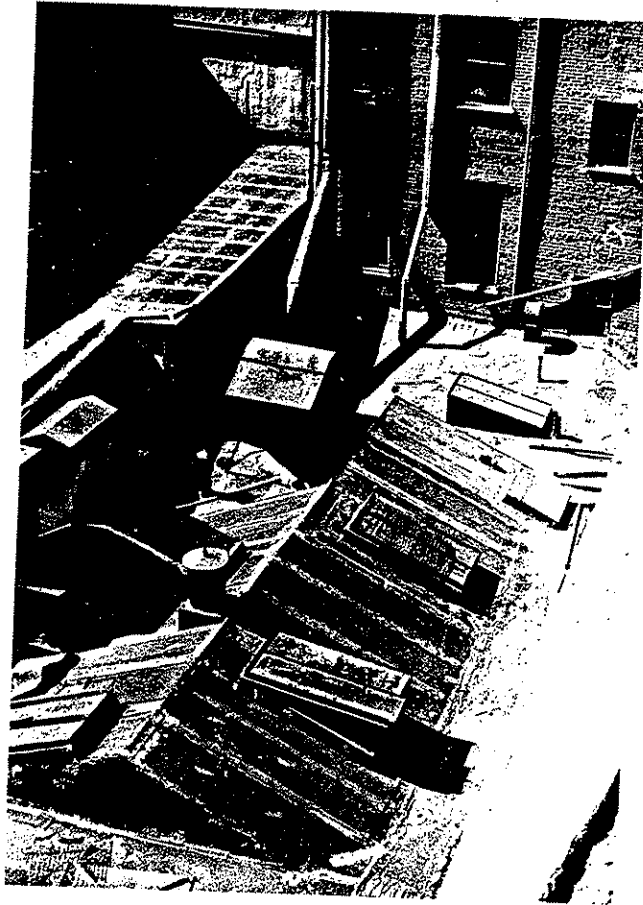


Plate 1.4. General view looking east across yard of Trenton House property towards rear wing of hotel; principal archaeological excavation areas were below roofs in foreground inside one-story structures erected within former yard (Photographer: Richard Hunter, March 1987).

Phase 3 archaeological investigation of the Trenton House property took place between July 31 and August 28, 1987 and involved limited expansion of the excavations already undertaken as part of the Phase 2 studies. Although detailed mapping of the basement and first floor plans of the Trenton House was also conducted as part of the Phase 3 work (see below, Figures 5.1 and 5.2), the bulk of the archaeological excavation effort was expended in the Phase 2 rather than the Phase 3 investigations.

Concurrent with the Phase 3 fieldwork at the Trenton House, a Phase 1-level archaeological field investigation was performed in the previously inaccessible southwest quadrant of the block. This latter activity resulted in the identification of a further area with archaeological potential in the rear portion of 12 North Warren Street. A Phase 2-level study was subsequently completed for this area in late August, 1987. Although a pair of 19th-century cisterns and other features recorded during this work were considered eligible for the National Register of Historic Places, the research potential of the 12 North Warren Street archaeological deposits was effectively exhausted through the Phase 2 studies. Phase 3-level archaeological investigation of this portion of the block was therefore not considered necessary.

As part of the program of mitigation devised for the Capital Center Project limited archaeological monitoring of the demolition of the Dunhams Block was also undertaken during December, 1987 and January, 1988. This chiefly involved photographic recording of the various building foundations and other cultural features that were exposed during the ground preparation phase of the Capital Center construction. A brief overview of the monitoring activity is included in Appendix E with miscellaneous details of other features recorded in the Dunhams Block basements during the Phase 1 investigations.

The final element of the Dunhams Block archaeological investigations entailed analysis of the accumulated data from the various phases of work and the preparation of a final report. This report consists of two volumes. Volume 1 contains a historical and archaeological synthesis of the properties that formed the principal focus of archaeological study (the Trenton House and 12 and 14 North Warren Street) and various background information necessary for a full understanding of these properties in the context of the block as a whole. Volume 2 contains the bulk of the technical data from which the synthesis in Volume 1 is derived and includes various other historical and archaeological information relating to other portions of the Dunhams Block.

B. Criteria of Evaluation

The information generated by this survey was considered in terms of the criteria for evaluation outlined by the U.S. Department of the Interior, National Register Program:

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association, and:

- A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. that are associated with the lives of persons significant in our past; or
- C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. that have yielded, or may be likely to yield information important in prehistory or history.

Ordinarily, cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

- A. a religious property deriving primary significance from architectural or artistic distinction or historical importance; or
- B. a building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
- C. a birthplace or grave of a historical figure of outstanding importance if there is no other appropriate site or building directly associated with his productive life; or

D. a cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or

E. a reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or

F. a property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own historic significance; or

G. a property achieving significance within the past 50 years if it is of exceptional importance.

C. Definition of Terms

The following definitions are from the Department of the Interior, National Register of Historic Places 36 C.F.R. 63 (Federal Register, Vol. 42, No. 183, Wed. Sept. 21, 1977, pp. 47666-67):

1. A "district" is a geographically definable area, urban or rural, possessing a significant concentration, linkage or continuity of sites, buildings, structures, or objects which are united by past events or aesthetically by plan or physical development. A district may also be comprised of individual elements which are separated geographically but are linked by associations or history.

2. A "site" is the location of a significant event, or prehistoric or historic occupation or activity or a building or structure whether standing, ruined, or vanished where the location itself maintains historical or archaeological value regardless of the value of any existing structures.

3. A "building" is a structure created to shelter any form of human activity such as a house, barn, church, hotel or similar structure. "Buildings" may refer to a historically related complex, such as a courthouse and jail or a house and barn.

4. A "structure" is a work made up of interdependent and interrelated parts in a definite pattern or organization. Constructed by man, it is often an engineering project large in scale.

5. An "object" is a material thing of functional, aesthetic, cultural, historical, or scientific value that may be, by nature or design, movable yet related to a specific setting or environment.

D. Previous Research

Prior to these investigations and the companion historic architectural studies performed for the Capital Center Project (Acroterion 1988), there has been no detailed historical or archaeological research directed specifically at the Dunhams Block. There have, however, been a number of wider-ranging historical publications that make mention of the block and its constituent commercial and residential properties. In recent years there have also been certain project-specific cultural resource studies that supply useful background and comparative data for the work described in this report.

Nineteenth- and 20th-century histories of Trenton and Mercer County (e.g., Raum 1871; Woodward and Hageman 1883; Stryker 1893; Lee 1895; Hewitt 1916; Trenton Historical Society 1929; Podmore 1964; Turk 1964; Toothman 1977; Quigley and Collier 1984) make frequent reference to the Dunhams Block and its immediate vicinity, and on occasion these sources discuss individual properties within the block. A modicum of architectural information on the block can be found in the recent historic sites survey of Trenton's North Ward (Aurand *et al.* 1983). A few secondary sources and newspaper articles cover some of the more important commercial entities within the block such as the various newspaper offices (Johnston 1932) and the Dunhams department store (e.g., Trenton Chamber of Commerce 1937; "Dunham's, 100 Years Old, Has Big Plans for Future." Trenton Times, September 18, 1955; Hastedt 1955; Lane 1980). Finally, standard genealogical sources for New Jersey provide family histories for individuals prominent in the history and commercial development of the block (e.g., Cooley and Cooley 1883; Lee 1907; Lee 1910; Stillwell 1930).

Within the past decade or so there have been a number of archaeological studies carried out in downtown Trenton in conjunction with environmental impact reviews of state and federally supported development projects. These studies have mostly involved projects immediately to the west of the Dunhams Block. They include surveys of two other properties developed by DKM Properties Corp.: 146-152 West State Street, a property now occupied by the Capitol View office building (Heritage Studies, Inc. 1984); and the block containing the new office building at 33 West State Street (Hunter Research Associates 1987c). Other environmental impact-related archaeological studies in the downtown include investigations performed in connection with improvements to the Ferry Street ramps accessing U.S. Route 1, where an early 18th-century house site was discovered (Kalb *et al.* 1982), and to N.J. Route 29 (carried out by Louis Berger & Associates, Inc.; as yet unreported).

The most intensive archaeological research within the historic core of the city, however, has taken place in the area around the New Jersey State House and the Old Barracks. Over the past six years, a series of studies has been undertaken in this area in connection with the renovation and expansion of the State House complex (Hunter Research Associates 1989a) and with the installation of a network of hot and cold water lines in the city's downtown (Historic Sites Research 1983; Historic Sites Research 1987; Historic Sites Research 1988). Finally, within the past year, a productive research-oriented archaeological investigation has been carried out at the Old Barracks in conjunction with the restoration of this structure (Hunter Research Associates 1989b).

E. Research Methodology

Urban archaeological projects challenge the organizational and interpretive skills of the archaeologist in unusual ways and often require relatively unorthodox approaches to research and fieldwork. In the case of the Dunhams Block investigations, virtually all of the archaeological fieldwork was carried out indoors with little natural light and with numerous obstacles to excavation and easy movement about the site. The more traditional methods of locating, excavating and analyzing archaeological resources, as exemplified in the work of such archaeological stalwarts as Sir Mortimer Wheeler (1954), only partially apply in a present-day urban environment such as this where deeply stratified deposits tend to survive as "islands" within and between standing buildings.

In general terms the research methodology adopted for the archaeological investigations of the Dunhams Block was modeled on the urban archaeological strategies developed in the late 1960s and 1970s in Europe. With the Phase 1-level investigation the principal goal of the historical research and fieldwork was to establish whether any sizable "chunks" of archaeological stratigraphy survived within the Dunhams Block. To a large degree, this goal was tantamount to determining how much of the block was free of basements. Over the past two decades basement-focused analyses of urban environments have been used to good effect in assessing the archaeological potential of cities. The pioneering study of this type was a survey carried out for the City of London (Biddle and Hudson 1973) and ideally, for proper integration of archaeology with the planning process, one would wish for similar broad-based archaeological implications surveys in every historic city in the United States.

So far as the Dunhams Block was concerned, while cultural features such as wells and privies (and perhaps also trash pits and septic) were considered likely to survive in truncated form below basement level, it was presumed that the excavation of basements (especially the deeper basements associated with the later 19th- and 20th-century redevelopments within the block) would in most instances have destroyed any earlier archaeological remains. Major areas that were free of basements were therefore considered to be of primary archaeological interest. Truncated deeper features and existing foundations (which, in the case of the Dunhams Block, showed abundant evidence of multiple re-use, but were extremely difficult to interpret) were consciously regarded as being of secondary archaeological interest.

Historical research played a critical role in assessing the archaeological potential of the Dunhams Block and in delimiting the extent of basements. Initially, the emphasis was laid on historic map research. Obtaining a full and detailed grasp of the historic map information is an essential prerequisite of urban archaeological fieldwork. Trenton has excellent map coverage from the mid-19th century onwards (see below Chapter 4), so that it is possible to literally trace the developing cultural landscape within the block and establish which areas remained open during the historic period. Generally speaking, all four street frontages were built up early on, with basements often being enlarged or deepened with each subsequent redevelopment cycle. The interior of the block and the alleys giving access to this space remained open longest, although by the early 20th century virtually the entire block was built over.

A useful supplement to the historic map data were the city tax assessors records which give a detailed floor-by-floor breakdown of each premises within the block at various points in this century. By piecing this information together with the historic map data it was possible, without even setting foot within the block, to obtain a fairly clear picture of the character of the block below the first floor level.

The final and most arduous element in the program of historical research was the systematic examination of primary and secondary sources relating to the block. This activity, especially intensive during the Phase 1 investigation, continued throughout the Phase 2 and Phase 3 studies and finally enabled a detailed reconstruction of the history of land use within the block. The most informative primary sources were deeds and surrogates records, sale advertisements, tax ratable assessments, city directories and census data. Other helpful information was found in published secondary sources and in 20th-century newspaper articles.

Once armed with the historic maps, city tax data and an increasing body of primary archival information, the Phase 1 archaeological fieldwork was set in motion. This entailed working systematically through the block, basement by basement, measuring and plotting walls and other features on to large scale maps. The Dunhams Block was unusual in that many of the basements were interconnected and it was actually possible to enter a basement on one of the street frontages and obtain access to basements along any of the other three streets. This was a result of the Dunhams department store owning the bulk of the block during the middle part of this century. While the interconnecting basements facilitated the field survey, the fact that one was working mostly with flashlights, was often standing in water and was frequently hitting ones head on asbestos-clad pipes complicated matters considerably.

Field inspection of the block was supplemented with limited subsurface testing through floors at the first floor level (where an absence of basements was suspected) and in some of the small areas of open space. A few tests were also excavated in basement floors to confirm that archaeological stratigraphy did not survive below this level. The end result of the Phase 1-level research and field investigations was the identification of three relatively extensive basement-free areas (the yard of the Trenton House, the alley between 12 and 14 North Warren Street, and the rear portion of 12 North Warren Street [Figure 1.4]) and various features of archaeological interest within the basements (e.g., evidence of earlier structures, fireplace supports, privies, etc. [see below, Chapters 5B and 6B and Appendix E]).

The main focus of the Phase 2 and Phase 3 archaeological investigations was the excavation of portions of the Trenton House yard, an area that was covered over with single-story structures in the early part of this century and in its most recent capacity had housed the hotel office and the kitchens for the Lido Gardens Chinese restaurant (Plates 1.1-1.4). In the Phase 1 studies two small trenches (each about 1.5 by 4 feet in plan) had been excavated with great difficulty through the floor of the restaurant kitchens revealing archaeological stratigraphy to depths of more than five feet below the floor level. For the Phase 2 investigations, it was agreed that three areas would be excavated, totalling 385 sq.ft. or roughly 12% of the estimated zone of archaeological interest.

These areas (termed excavation units and measuring 9 by 14 feet, 8 by 20 feet and 9 by 11 feet) were excavated by the "open area" method, a strategy that aims for maximum horizontal exposure and exercises flexible vertical control through the use of temporary balks. Open area excavation

techniques, widely used on deeply stratified urban archaeological sites in Europe, allow for a more comprehensive analysis of stratigraphic relationships than the traditional, Wheelerian method of excavating within a grid of boxes (Biddle and Kjolbye-Biddle 1969; Barker 1977; Harris 1979).

In reality, open area excavation inside decrepit standing buildings within an urban block is no easy task and requires detailed planning and careful attention to safety considerations. For the Dunhams project, furniture and fittings had to be removed both from the excavation areas and from spoil disposal areas. Flooring and joists had to be jackhammered and cut out from above the excavation units. Adequate access had to be ensured to, from and between the excavation units (this required breaking through walls and cutting out floors in such a way that earth-laden wheelbarrows could still be wheeled around the site). It was necessary to check that all utilities had been shut off and did not pose a hazard to excavators, and yet a power source was necessary so that the excavations could be adequately lit.

Lighting presents some of the biggest challenges to the indoor archaeologist. Artificial light not only makes recognition of soil distinctions extremely difficult, it greatly complicates photographic recording procedures and, of course, as the excavations get progressively deeper, ever larger shadows are cast by the sides of the excavation units and other structural features.

Another major problem was where to sift and ultimately dispose of the excavated soils. For the Trenton House excavations, sifting screens were set up over an open elevator shaft and soils were sieved directly into the basement. Other soils were unceremoniously piled up on top of the tables and seats in the restaurant dining room. Safety aspects were of increasing concern, as the excavation units ultimately reached considerable depths (up to 14 feet deep in the case of Excavation Unit 2 where the interior of an ice house was partially emptied out).

For all the logistical obstacles and potential hazards, pre-demolition urban archaeology does enjoy certain important advantages and, on balance, this consultant would prefer to conduct archaeological excavations of this type indoors rather than on an open, rubble-strewn site after buildings have been torn down. In the former environment excavation can proceed unimpeded by bad weather. Soils stay moist. Mapping is usually greatly simplified as all measurements can be related to existing buildings that have already been surveyed.

The greatest advantage of pre-demolition archaeology, however, is the benefit that can be derived from being able to analyze the archaeological resource in conjunction with the standing buildings. This ready access to the architectural data time and again resolved questions about the archaeology that might otherwise have gone unanswered. On open urban sites the archaeologist frequently expends considerable energy linking excavated foundations to recently demolished structures, whereas, when the buildings are still standing, this exercise is unnecessary. Ultimately, the correlation of archaeological and architectural data with the documentary record enabled an exceptionally complete reconstruction of the development sequence of the Trenton House property. This has resulted in a somewhat different interpretation of the buildings emerging compared with that put forward by Acroterion on the basis of the historic architecture (see below, Chapter 5C).

The Phase 3 field investigations of the Trenton House property resulted in the excavation of an additional 150 sq.ft. (or 5%) of the basement-free yard area. These latter excavations consisted of extensions of two of the Phase 2 excavation units and were designed to answer specific unanswered questions raised by the Phase 2 work. In addition to the open area excavations carried out within the yard of the Trenton House, the Phase 2 investigations included similar block excavations in the interior of 12 Warren Street and in the alley between 12 and 14 North Warren Street. These excavations, involving four units covering an area of roughly 200 sq.ft., presented fewer logistical problems than those on the Trenton House property, although the 12 Warren Street excavations required the mechanical removal of a concrete floor. For all these units, there was at least some natural light available, while excavated soils could be easily dumped in the alley.

Following the demolition of the block and during the ground preparation phase of the Capital Center construction project limited archaeological monitoring was conducted. This concentrated on an examination and photographic recording of the foundations along the street frontages and establishing the depth of the ice house (it had been too dangerous to fully excavate this feature while the buildings were still standing).

Analyzing the data and producing an integrated report for these multi-phase, multi-property historical and archaeological investigations was a daunting task requiring careful organization and consistently systematic procedures. The historical information has been processed and assembled, as one would expect, chronologically by individual property, with narratives being prepared for the block as a whole (Chapter 4) and for the Trenton House (Chapter 5A) and 12 and 14 North Warren Street (Chapter 6A) properties. The remaining historical information is presented in abbreviated

form in Appendix A. Historical research, for the most part, concentrated on the pre-1900 period with particular emphasis on the 18th and early 19th centuries. The later historical periods were adequately researched by Acroterion (1988) during the historic architectural studies.

Processing of archaeological stratigraphic data was accomplished through exhaustive analysis of field records and field drawings (plans and profiles). A version of the Harris matrix system (Harris 1979) was used to analyze stratigraphic relationships, which are perhaps the key to understanding the chronology and sequence of land use actions on deeply buried sites like those reported on here. This analytic activity resulted in the production of "matrices", which are included in Chapter 5B and 6B. These serve as a sort of organization chart for the stratigraphy and are of considerable assistance in defining the major phases of cultural activity within the archaeological record. The matrices should be studied in conjunction with the summary of stratigraphic data produced as Appendix B.

Processing of artifacts was undertaken concurrently with the stratigraphic analysis. While a rich assemblage of materials has been recovered, the quantities, when broken down into individual contexts, are relatively small. As a result, only a simple inventory of artifacts has been presented (Appendix C). The threads represented by the historical, architectural, stratigraphic and artifactual data from the Trenton House and 12 and 14 North Warren Street properties have been drawn together into brief syntheses in Chapter 5C and 6C.